

K&M NEWS

SEPTEMBER 1998

K&M/KMR Sign Agreement to Develop SiHwa Co-Generation Project in South Korea

In June, K&M/KMR concluded a Memorandum of Understanding, and associated consulting agreement, to assist in the development of the SiHwa Power Project on behalf of Seohae Energy of South Korea, which will serve as the project management company. Project sponsors are Ssangyong Engineering and Construction Co. of South Korea, Marubeni Corporation of Japan and KMR Power Corporation of the United States.

The SiHwa Power Project, a 200 MW coal-fired co-generation facility, will be structured on a 20-year Build-Own-Operate (BOO) basis and is expected to attract up to \$400 million in foreign capital. This new facility will be located in an industrial complex west of the capital city of Seoul. Steam will be provided to key industries in the complex with the electricity to be sold to the state-owned utility, KEPCO.

K&M senior vice president William Drotleff, representing K&M and KMR, signed the MOU together with representatives from Ssangyong and Marubeni. The MOU calls for approximately \$100 million equity participation by KMR and Marubeni, with a 33% stake each in the Seohae Energy Company. Ssangyong will hold the remaining 34% stake. In addition, KMR and Marubeni will attempt to raise \$300 million from the international financial market.



SiHwa Project Team Signs Memorandum of Understanding.

Construction is expected to begin after mid-1999, with completion anticipated by late-2001. In addition to KMR's equity participation, K&M will provide consulting services to assist Seohae Energy in the structuring of key project agreements, while Ssangyong will provide engineering, procurement and construction services, and Marubeni will provide key equipment.

Successful development of the SiHwa Co-Generation Project will require preparation and negotiation of complex project agreements which appropriately allocate risks between the project sponsors, lenders and buyers, and ultimately lead to financial close.

SiHwa continued page 5



Ghana's First IPP to be Developed by KMR Power

Assists Ghana Through Energy Crisis



An agreement of support on behalf of the Ghanaian Ministry of Mines and Energy was signed by KMR Power to develop a 220 MW gas-fired, combined cycle power plant. This project represents the first IPP in Ghana and is a milestone in the country's efforts to restructure its economy in order to promote foreign direct investment.

The 220 MW Ghana Industries Power Project facility will be built, owned and operated by a KMR Power-led consortium that includes Emerging Power Development Limited of the United States and Marubeni Corporation of Japan. K&M is providing technical and financial advice and assistance in site selection.

Up to 100 MW of plant capacity will be used to supply Ashanti Goldfields Company Ltd., the primary sponsor of this project, which currently utilizes 80-84 MW for all of its operations. The remaining 120 MW will be sold to the Electricity Company of Ghana, the state-owned power distribution company, for resale to the country's growing industrial and mining sector.

Ashanti Goldfields Company, one of the 10 largest gold mining companies in the world, initiated development of this new power project in 1997 in order to assure that its future production plans would not be constrained by national power supply limitations. Construction is expected to begin by the early 1999, with initial operation by the end of 1999.

The new plant will be constructed near the Tema area of Accra, Ghana's capital city, which is located on the Gold Coast of West Africa. It will be fired with natural gas brought via the new West Africa pipeline from gasfields along the southwest coast of Nigeria.

In order to support development of the proposed IPP, the Volta River Authority has registered a subsidiary transmission company which will take over responsibility for the operation of the National Transmission Grid and the Volta Load Dispatch Center.

Ghana continued page 3

Message from the Chairman

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Michael Kappaz
Chairman and CEO

Dear Friends of K&M:

Our ten year anniversary celebration prompted greetings from friends, colleagues, clients, teaming partners, and government officials from around the world. Your good wishes deeply touch me and provide inspiration to continue our expansion into new industry sectors where K&M can share the knowledge we have gained in developing and financing innovative private power projects with owners and developers of new water and telecommunications projects.

It is appropriate to pay tribute to the K&M employees who staff our field offices around the world. In an industry where field or project offices open and close at start up and completion, two K&M field offices have become key to our operations overseas. The Cartagena, Colombia office recently celebrated its five year anniversary (profiled in this issue), and the Cairo, Egypt office has become a cornerstone of K&M's operations in the Middle East (to be profiled in our next issue). These two field offices have been at the forefront of developing critically needed power projects in Colombia and Egypt, and have grown to manage new projects in the telecommunications and water sectors.

And, as we look to the future, K&M launches into two new important markets, South Korea in Asia, and Ghana in Africa continuing our history of pioneering international competitively bid projects that pave the way for future economic development in emerging economies.

Michael H. Kappaz

K&M to Complete Bid Evaluation in Sri Lanka

In August, the government of the Democratic Socialist Republic of Sri Lanka selected K&M as its technical consultant to evaluate proposals received from private developers for a proposed 140-180 MW combined cycle BOOT power plant. This new facility is to be constructed at the Kelantissa power station complex, located in the northern part of the capital city of Colombo.

K&M will prepare the technical portion of the evaluation working with counterparts from the Ministry of Irrigation and Power and the Board of Investment.

K&M plans to complete the technical evaluation and submit its recommendations to the Ministry and the Ceylon Electricity Board by the fall of 1998 so that the selected developer and the GOSL can sign a letter of intent this year. The U.S. Agency for International Development is providing funds to the GOSL for the technical consultant.

This BOOT represents an important step in the introduction of privately financed infrastructure in Sri Lanka, and a significant new market for K&M. "We are pleased to assist the GOSL to structure and carry out a thorough and transparent bid evaluation for this project. K&M looks forward to forging a long term relationship that will help the GOSL attract critical new funding resources," remarked K&M senior vice president William Drotleff.

For further information, contact K&M technical director Marty Tormey at K&M-Washington.

GHANA INVESTMENT CLIMATE

"There are winds of reform blowing through Ghana which offers hope to the rest of Africa," remarked U.S. Secretary of Commerce William Daley as he kicked off the Clinton administration's historic trade mission to Africa this spring.

Globalization, with all of its uncertainties, is touching Africa too. Indeed, the official visit was viewed as an endorsement of Ghana's democratic and economic progress since embracing structural adjustment policies and economic reforms in the 1990s that have begun to turn the country around. New programs are paving the way for privatization and increased private investment.

There is great optimism among government and industrial leaders that Ghana is on the road to increased prosperity—lighting the way for Africa. Business, trade and investment are growing.

The Clinton administration's African Growth and Opportunity Act, submitted to the U.S. Congress in late 1997, sets forth a new strategy for promoting economic self-reliance throughout sub-Saharan Africa and attracting private investment to this long-neglected continent. This landmark trade bill drew strong bipartisan support in the U.S. Congress, easily passing the House of Representatives in July. It was then sent to the Senate for approval.

Ghana has fully embraced the opportunity for bilateral cooperation. Vice President John Mills recently stated "The government will vigorously implement the Ghana Gateway project . . . to accelerate the country's growth strategy and facilitate trade."

AFRICA

GHANA IPP *continued from page one*

Ghana's current energy crisis has put this project on a fast-track. Severe drought in the region since early 1998 has drastically reduced output by the country's main power source at the 1,072 MW Akosombo hydroelectric dam by nearly 50%. This has forced Ghana to severely ration and load-shed supply to industrial and consumer users. Apart from a small 20 MW diesel plant in Tema, the 200 MW Takoradi plant is Ghana's only other power station.

Although Ghana has been able to import electricity from neighboring Côte d'Ivoire to alleviate a portion of demand, the amount is far below requirements (20 MW during the day and 70 MW at night), is extremely expensive and has imposed a drastic reduction in industrial output. Côte d'Ivoire has attempted to supply electricity to neighbouring Togo and Benin who also depend heavily on Ghana's Akosombo power station for their electricity.

Negotiations between the KMR consortium and the Ministry of Mines and Energy were concluded just prior to U.S. President William Clinton's trade mission to Africa in March. KMR chief financial officer Denis Slavich, representing the consortium, signed this milestone agreement together with Ghana's Minister of Mines and Energy, Fred Ohene-Kena. "It is their and our top priority to get this much needed power to the country as quickly as possible," Slavich said. "This facility will increase capacity by 20 percent and will contribute significantly to Ghana's economic growth. The project is an important step in the government's efforts to promote the development of private power suppliers in Ghana," Slavich continued.

The signing ceremony took place following a luncheon honoring the launch of the Ghana 100 Club. Organized by the Ghana Investment Promotion Center, membership consists of the top 100 corporate institutions in Ghana, including Ashanti Goldfields, and represents the emergence of a new entrepreneurial spirit following implementation of economic reforms within the past several years.

The luncheon was attended by members of the president's delegation, including U.S. Secretary of Commerce William Daley and U.S. Secretary of Transportation Rodney Slater, as well as Ghanaian Vice President John Mills. Their remarks emphasized the importance of the growing trade relationship between the United States and Ghana, and recognized the contribution that KMR Power is making by developing this critically needed power facility so vital to economic growth. "KMR Power is proud to be in partnership with the Ghanaian people and Ashanti Goldfields in helping to meet Ghana's ever growing energy needs as the economy continues to expand at a rapid

rate. The positive attitude of all involved, including our Ghanaian partners, leaves no doubt as to why Ghana is commonly referred to as the gateway to Africa," remarked KMR chairman George Kappaz

Prior to the current energy crisis industrial users experienced frequent power outages due to transmission problems, there was a growing uncertainty about the state-owned utility's ability to supply enough power, and prices were rising to an unaffordable rate. These conditions prompted Ashanti to seek a reliable power source for its own use.

Between November 1997, and March 1998, K&M/KMR conducted technical and financial evaluations of the project on behalf of Ashanti Goldfields Company to determine the optimal size, location and financing resources available for this new facility.

While Ashanti originally proposed a 100 MW captive facility, results of the evaluations revealed that a plant with a minimum of 220 MW, located in Tema, would be the most cost-effective. K&M/KMR recommended that Ashanti explore development of the larger plant and seek participation by other local industries and the state-owned utility in order to generate additional revenue by selling the excess power, while at the same time assisting Ghana to expand its generating capacity.

"Requirements are growing about 15% per annum and although Ghana is bringing new capacity on stream, like the Takoradi thermal station, it is lagging behind the increase in demand as a result of the national electrification process and new enterprises starting up," observed Ashanti's managing director for new business and planning Peter Bradford.

After thoroughly reviewing K&M/KMR's recommendations, and projecting a strong growth in demand, Ashanti moved ahead with the project in order to bring the new plant on line as quickly as possible.

Since March, the K&M/KMR team has continued to provide technical and financial advice to the project, assisted with site selection, and moved forward with development of the project.

For further information contact Denis Slavich at KMR Power, or Frank Staszsky, Jr. at K&M-Washington.



"There are winds of reform blowing through Ghana which offers hope to the rest of Africa."

*William Daley,
U.S. Secretary
of Commerce*

"KMR Power is proud to be in partnership with the Ghanaian people and Ashanti Goldfields in helping to meet Ghana's ever growing energy needs as the economy continues to expand at a rapid rate. The positive attitude of all involved, including our Ghanaian partners, leaves no doubt as to why Ghana is commonly referred to as the gateway to Africa."

George Kappaz, Chairman

KMRpower

"Big consumers have decided to come together to buy power. They know that the private sector can do it to free money from the government."

*Aarquaye Armah,
Energy Adviser to the
Ghana Ministry of
Mines and Energy*

"We are greatly concerned about Ghana's energy shortage and its effects on industries and the economy in general..." Bill Clinton, President of the United States

SOUTH KOREA TO OPEN ELECTRIC SECTOR

In June, the government of South Korea announced plans to revise infrastructure laws in order to attract private foreign investment.

South Korea's Planning and Budget Commission, the government's top policy-planning unit, has proposed adopting the widely utilized system of Build-Operate-Transfer (BOT) which allows builders to manage facilities for up to 20 years in order to recoup capital investment before transferring to government ownership. The committee is also considering a Build-Lease-Transfer (BLT) arrangement.

In response to the current financial crisis, South Korea is moving forward to privatize major state-owned companies, including the electric utility, KEPCO. During the second half of 1998 up to 5% of KEPCO plus two of its power plants will be sold, thereby breaking the utility's monopoly in the sector. In the long term KEPCO may be restructured to unbundle generation, transmission and distribution.

To meet demand, South Korea must double current capacity to 67 GW by 2010. IPPs are expected to provide up to 6 GW new generation.

Currently, importation and construction loans are limited to \$100 million per year, and foreign ownership stakes are limited to 50%. Other incentives being debated are expansion of government guarantees, tax benefits, fiscal support, risk sharing and force majeure coverage.

VIETNAM PHU MY II, PHASE II Six Bid for BOT Power Project

Vietnam's Phu My II, Phase II BOT power project attracted highly competitive proposals from six international consortiums representing 20 companies. Bids received offered a close range of design capacity, estimated at between 745 MW and 715 MW.

The Phu My II, Phase II project is the first BOT to be awarded by Vietnam on an international competitive bid basis.

The K&M evaluation team spent five weeks in Hanoi undertaking extensive analysis of technical and financial submissions. Further discussions are expected with the Ministry of Industry and other government organizations to gain government approval.

Since 1996, K&M has served as BOT consultant to this milestone project being developed in the Ba Ria Vung Tau Province outside of Ho Chi Minh City. Construction of the plant is expected to be completed by October 2001.

According to the *Viet Nam News*, with six BOT power plants to be operational within the next few years, Electricity of Vietnam expects to double current electricity and design capacity (respectively) to 30 billion Kwh and 8,000 MW by the year 2000.

For further information contact K&M technical director Marty Tormey.



Vietnam's Ministry of Industry and K&M Engineering host Proposal Opening Meeting.

Above: (left to right) EVN general director Hoang Trung Hai; International Finance Corporation Vietnam chief of mission Wolfgang Bertelsmeier; EVN, Phu My Ba Ria Project Management Board chairman Tran Trong Quy; and K&M technical director Marty Tormey. Left: K&M procurement manager Guy Knowle and Marty Tormey.

Vietnamese Power Delegation Study Tour of United States

In March, K&M hosted a delegation from Vietnam's Ministry of Industry (MOI) and Electricity of Vietnam (EVN) for a ten day study tour. This study tour was an opportune occasion to discuss important areas of mutual concern and interest as the delegation's visit coincided with K&M's preparations for a senior staff level mission to assist the Government of Vietnam and EVN in the evaluation of bids for the Phu My II, Phase II BOT project.

The study tour was led by Mr. Phan Son Ha from the Ministry of Finance. He was joined by Mr. Tran Quoc Lam, Deputy Director, Economic and Estimation Department, EVN, Mr. Nguyen Minh Chien, Chief Accountant, Management Board of Phu My Ba Ria Power Projects, EVN, and Mr. Nguyen Duy Minh, Project Manager, KHM Infrastructure Development Consulting Company.

In addition to briefing sessions held at K&M headquarters, the delegation attended meetings in Los Angeles and New York City, visited Vietnam's new embassy in Washington D.C., and toured a power plant in Central Virginia, similar to the one to be developed at the Phu My II site.

Prior to the delegation's visit, K&M also had the opportunity to welcome to its headquarters Ministry of Industry officials Mr. Pham Manh Trang, Mr. Mai Cong Mung and Mr. Ngo Duc Hanh. During this visit the procedures to be employed during the opening and evaluation of bids for the Phu My II, Phase II BOT were discussed. This discussion paved the way for a thorough review of bids by the Government of Vietnam and EVN in collaboration with the senior level team from K&M led by Marty Tormey.

For further information, contact Marty Tormey at K&M-Washington.

Study Tour Delegation



U.S. Capitol, Washington, D.C.

Doswell Combined Cycle Electrical Generating Facility Hanover County, Virginia



Left: Phan Son Ha (Ministry of Finance), Tran Quoc Lam (EVN), Nguyen Minh Chien (Phu My Management Board), and Nguyen Duy Minh (KHM).

Below: Henry Steingass, (K&M), Nguyen Minh Chien (Phu My Management Board), Tran Quoc Lam (EVN), Manny Sanchez (Doswell Power Plant), Hai Trinh (translator), Nguyen Duy Minh (KHM) and Phan Son Ha (Ministry of Finance).

K&M HOSTS CONSTRUCTION MANAGEMENT SEMINAR FOR CHINESE DELEGATION

In February, a 16 member delegation representing the People's Republic of China Ministry of Water Resources and various Chinese provincial and municipal water resources, institutes and educational organizations visited K&M's headquarters in Washington, D.C.



China Water Delegation Briefing

K&M senior vice president, William Drotleff, led a full day briefing by K&M project managers offering insight into methods, approaches and achievements in the area of construction management for water and water treatment projects by American companies.

K&M presented case studies and highlights of several projects the company has completed, or is currently managing, utilizing two primary approaches:

- Engineer-Procurement-Construction Management/Turnkey Contractor, and
- Construction Management Consultant/Design Build Contractor.

The advantages of the two approaches were examined as outlined in the chart below:

ADVANTAGES OF TWO APPROACHES

EP-CM/Turnkey

*Greater control of design
Greater control of schedule
Greater control of costs
Higher value added to project*

CMC/Design Build

*Greater design innovation
Potential for schedule savings
Potential for cost savings
Higher leveraging of services*

K&M will assist Seohoe Energy to draft key project agreements including: the Project Company Formation

Agreement, Power Purchase Agreement with KEPCO, Steam Supply Agreement with industrial buyers, Fuel Supply Agreement, EPC Contract, O&M Agreement, Land Conveyance Agreement, and Insurance Agreements.

In addition, K&M will provide advice regarding environmental and other permits, security requirements, and legal structure. On the financial side, K&M will provide detailed financial models, risk analysis, and debt and equity financing options.

While South Korea has been considered one of the world's most promising emerging markets over

SIHWA PROJECT

(continued from cover page)

"Foreign investment restrictions in power generation assets in Korea are quickly being relaxed. SiHwa is one of the first projects to take advantage of these changes," remarked K&M senior vice president Bill Drotleff.

the past decades, recent conditions have forced the government to scale back in many areas, including the energy sector. Economic growth has slowed from 8% to less than 1%, in 1998, resulting in revised plans to add new generating capacity. South Korea uses a combination of thermal (coal, oil and LNG at 62%), nuclear (36%) and hydro electricity (3%) to meet demand. With growth expected to double in the next 12 years as the economy recovers, the SiHwa project will contribute significantly toward expanding supply while attracting critically needed foreign private sector investment in the country. For further information contact K&M technical director Marty Tormey or K&M project manager Henry Steingass at K&M-Washington.

China's Water Sector

Conclusions presented in a rare study conducted by the U.S. National Intelligence Council, predict that a severe water crisis is looming in China, the world's most populous country. With a population expected to reach 1.5 billion by 2025, China is simply running out of water—which severely impacts its ability to grow crops and expand its industrial base.

The NIC report indicates that the Yellow River—China's largest—failed to reach the sea on 260 days in 1997 with industrialization using most of the remaining water upstream. Aquifers are drying up; rivers, streams and lakes that were once thriving no longer exist.

Over the past decade, China's economy has been among the fastest growing. Industrial use coupled with a migration from farm to city is already putting a strain on this scarce commodity.

Government officials are exploring means to mitigate a future crisis. The ability of China to meet its burgeoning water supply needs will be influenced by its success in attracting foreign investment, and that, in turn, offers challenging opportunities for innovative project structuring.

In The News

COLOMBIA

Mundo Electrico Colombiano
"Termovalle" April-June

Global Power Report
"Colombia's Gas-Fired Plants
Earn High Spot Prices, Ease
Threat of Rationing"
KMR Power 240 MW
Termovalle Project, March

South America Report
"Caribetel Goes On-Line in
Cartagena" — KMTel Tele-
communications Project,
April

EGYPT

Middle East Economic Digest
"Twenty Groups Line Up For
BOOT Power Contracts"
July

Electric Power International
"El-Kureimat Powers Modern
Egypt" — Plant Profile
Summer 1998

Middle East Economic Digest
"Bids to be Invited for US-
Funded Telecoms Scheme"
March

GENERAL

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Desarrollo Nacional
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Sources" — Al-Manah Power
Station (Oman) April/May

Project Finance
"The Middle East IPP Market"
K&M (Jordan BOT consulting
project; Tunisia BOT consult-
ing project) March

National Development/
Desarrollo Nacional
"Global Trends: Financing
Independent Power Projects
in the Developing World"
February/March

Washington Post, Washington
Times, Project & Trade Fi-
nance, Global Power Report,
Power, Power in Asia
"William Drotleff Appointed
Senior Vice President of
K&M;" "The M of K&M
Retires" Winter 1997-98

Washington Post, Washington
Times, Project Finance,
Bridge News
"KMR Power names Denis
Slavich Vice President and
Chief Financial Officer"
Winter 1997-98



Left to right above: Lucas Kappaz (K&M consultant), Ximena Diaz (assistant secretary), Paolo Jeni (technical assistant), Rodolfo Rueda (accountant), Rafael Arrieta (driver), José Kappaz (general manager), Tarcila Gómez (office assistant), Steve Johnson (technical director), Carolina Vides (secretary), Diego Cabrales (KMR consultant)

In February 1993, K&M Servicios Técnicos (Colombia) Ltda., a spin off of U.S.-based K&M Engineering and Consulting Corporation, opened offices in Cartagena, Colombia to manage what the energy and financial world would come to recognize as the first non-recourse private power project in Latin America—the **100 MW Mamonal Power Project**.

Recognized by several prominent project finance publications as "The Most Creative Deal of the Year," the Mamonal project truly launched the global reputation for K&M in the company's early years.

Mamonal resulted in an award-winning power project that reached financial close not only in an extremely difficult investment environment, but was completed and put into commercial operation in record time.

José Kappaz, an attorney, businessman and professor, headed the newly opened office. (See *Meet our Managers* on page 11.) He managed day-to-day operations of the Mamonal Power Project. A committed team of engineers, construction managers, financial analysts and administrative staff were instrumental in making the Mamonal Power Project a success story that has been used as a model to develop new projects in other regions of the world.

Working with Colombian government and utility officials, the Mamonal project team consisting of K&MST, K&M Engineering, KMR Power, Rockefeller and Company, Chase Manhattan Bank and Proelectrica, achieved a truly remarkable milestone in the implementation of greenfield power projects in the developing world. It was made possible, in part, by the formation of a closed power purchasing group—Proelectrica, a consortium of local industries seeking a reliable source of electricity.

Indeed, when the Mamonal project was announced, it was viewed by international developers and financial institutions as "The Deal" that broke the financing logjam which would ultimately lead to a new wave of overseas development projects.

As the Mamonal project neared construction completion, K&M chairman Michael Kappaz, KMR

*KMR Power Corporation congratulates
I am looking forward to continuing to
George Kappaz, President and CEO, KMR*



Five Year Awardees: Left to right—Rafael Arrieta (driver), José Kappaz (general manager), and Tarcila Gómez (office assistant)

president and CEO George Kappaz, and K&MST general manager José Kappaz were frequently called upon to present a project case study to numerous high level international infrastructure development conferences in order to share the lessons learned. With only a handful of IPPs that had reached financial close in the early 1990s, the Mamonal case study attracted a great deal of interest. Clearly, a new way of thinking had emerged.

Mamonal demonstrated that financial close could indeed be achieved, even in an unproven market, when all aspects of the deal adhere to sound project structuring principles that address and mitigate all risks inherent in a private power transaction.

Several years later, in 1996, KMR Power launched another "first" for Latin America when it announced financial close for the **240 MW Termovalle Power Project** to be developed in the Valle del Cauca at Cali, Colombia. This plant is the first private power project in Latin America to sell electricity output to a government public utility without government guarantees.

KMR's Termovalle project is being developed in conjunction with equity partners Marubeni and Florida Power and Light. Other key players are K&M Engineer-

• 100 MW BOT MAMONAL

FIRST NON-RECOURSE PRIVATE PLANT AWARDED "DEAL OF THE YEAR" BY PROJECT FINANCE MAGAZINE
GAS TURBINE COMBINED-CYCLE
CARTAGENA, COLOMBIA (1992)

• CARIBETEL DIGITAL TELEPHONE SERVICES

LOCAL TELEPHONE, INTERNET AND CABLE
25,000 WIRELINES AND 5,000 FIXED WIRELESS
CARTAGENA, COLOMBIA (1997)

• 330 MW BOO TERMOCANDELARIA POWER PROJECT

GAS TURBINE SIMPLE-CYCLE
CARTAGENA, COLOMBIA (1995)

• 240 MW BOO TERMOVALLE POWER PROJECT

GAS TURBINE COMBINED-CYCLE
CALI, COLOMBIA (1995)

FIVE YEAR ANNIVERSARY

*K&MST on five years of success.
to blaze new trails together in Colombia!*
Power Corporation



**100 MW Mamonal Power Plant
Cartagena, Colombia**

ing, Chase Manhattan Bank, Scudder Latin American Power Fund, Interamerican Development Bank, Japan Export-Import Bank, Financiera Energetica Nacional de Colombia, North American Energy Services and Westinghouse.

Termovalle's construction financing was unprecedented in Latin America. It was achieved through an underwritten commitment for 100 percent of the project's debt requirements that was fully in place prior to bid submission. Permanent financing was obtained after award.

While Mamonal demonstrated that implementation of a project can be successful with the right structure in the absence of a detailed regulatory environment, KMR's

Termovalle project is an example of what is achievable within a new and rapidly evolving regulatory framework. These new regulations included open access wheeling, a marginal cost dispatch system for all the grid-connected power plants, and a spot market for electric energy.

Termovalle will also sell excess electricity to industrial facilities and to the Bolsa (Colombia's open



**240 MW Termovalle Power Project
Cali, Colombia**

pool system). This feature is unique to power project financings in Colombia, and has become a much-discussed topic in the U.S. and other developed markets.

The project has achieved initial operation in simple cycle and full operation is expected by the end of 1998.

Termocandelaria, the latest power project in the KMR portfolio, was initiated in 1995. This 330 MW merchant plant, to be located in the greater Cartagena area, will sell electricity to the Bolsa. It will utilize two Westinghouse 501F turbines fueled by natural gas. The fuel will be supplied by Texaco-Colombia and transported under a long term contract by Promigas.

K&M, in joint venture with Westinghouse, will perform the turnkey construction. KMR is the lead developer and principal owner of the Termocandelaria project. The plant is expected to start construction by the 4th quarter of 1998. For further information, contact project manager Worth Edwards at K&M-Washington.

Caribetell, a new digital telephone system being developed in Cartagena by KMTel, was featured in the previous issue of *KM News*. It represents K&M's entry into the telecommunications market in Latin America. This new company was formed in 1997 to offer telephone, internet and cable services to local residents of Cartagena.

While many of our readers may be familiar with the projects K&M/KMR are managing in Colombia, it is important to reflect upon the remarkable success achieved primarily through the dedicated efforts of our employees, consultants and team members. It is fitting, on this fifth anniversary, to step back and remember what the people involved have brought to this formula. The success of these milestone projects would certainly be impossible without their enormous contribution.

K&M/KMR are proud to manage a growing portfolio of projects in the energy and telecommunications sectors of Colombia that are contributing significantly toward the country's growing economy and improving the living conditions of its local citizens.

In The News continued

GHANA

KMR Power Project on behalf of Ashanti Gold-fields Company

June

Financial Times
"Power Crisis has Crippled Industry and Forced the Government Into Urgent Action"

Economist Intelligence Unit
"US May Invest \$3 Billion in Energy Development"

Journal of Commerce
"US to Light Up Ghana With \$3 Billion Investment"

Engineering and Mining Journal
"Gold Mines in Ghana Tackle Chronic and Acute Power Shortage Problems"

Financial Times
"Drought Turns Off Vital Tap"

May

Export Sales Prospector
"Construction Start-Up Planned on \$200 Million Power Plant"

April

Electricity Daily
"Ghana Gets 220 MW Project"

Inter Press Service via NewsEdge
"Ghana's Energy Crisis"

Inter Press Service
"Power Crisis Puts a Damper on Industry and Mines"

Africa Energy & Mining
"Agreement Confirmed and Another Signed with U.S."

Global Power Report
"KMR Leading Consortium Developing 220 MW Gas-Fired Project in Ghana"

Power Generation Technology & Markets
"Ghana Makes Power Buys"

Financial Times, Global Private Power
"Ashanti Eyes Captive Plants"

ESP Report on Engineering Construct & Operations in the Developing World
"Ghana: Project Feasibility for Proposed \$200 Million Captive Power Plant"



In The News continued

GHANA

March

Business Wire
"Ashanti Outlines Power Generation Plans—New Power Plants to be Constructed"

Africa News
"U.S. Consortium—Ghana Sign Power Supply Agreement"

Africa News Online
United States Information Agency
"United States and Africa: Commerce Sec. Daley Praises Ghana's Economic Progress"

Africa News
"Ghanaian Vice President John Mills Launches Ghana's Club 100 Top Companies"

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"Ghana Signs Power Supply Pact With U.S. Consortium"

U.S. Department of Commerce, "Remarks of U.S. Secretary of Commerce William M. Daley—Luncheon with Ghana Club 100, Accra, Ghana"

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"Ghana-U.S. Companies Sign Power Agreements"

High Street Journal
"Ohene Kena Speaks Again on Stabilising the Energy Situation"

Panafrican News Agency
"U.S. Consortium, Ghana Sign Power Supply Agreement"

Metals Week
"Ashanti Goldfields Signs Deal for New Power Plant"

Australian Associated Press
"Ashanti Goldfields Outlines Power Generation Plans—New Power Plants to be Constructed"

AAP Information Services
"Ashanti Signs Agreement on Power Project"

AFP-Extel News
"Ashanti Goldfields in Agreement to Support Development of Ghana Power Plant"

January

Reuters
"Ashanti Gold Looks at Power Plant"

Cairo Office Hosts Reception for Newly Appointed K&M Senior Vice President

In April, K&M Egypt hosted a gala reception at the Semiramis Intercontinental Hotel to introduce the company's new senior vice president, William Drotleff, to Egyptian government and utility officials as well as representatives from the broad spectrum of K&M projects currently under development in Egypt.

Mr. Drotleff, who previously held the position of technical director, was named senior vice president of operations by the K&M board in December 1997. Although Mr. Drotleff has been integrally involved with a variety of K&M's key projects since joining the company in 1992, he had not worked directly on the Egyptian projects.

The reception provided an opportunity to meet key personnel involved with the power, telecom and water projects currently underway in Egypt.

Project personnel in attendance included repre-



K & M — EGYPT

representatives from the Egyptian Electricity Authority, Telecom Egypt (formerly ARENTO), U.S. Agency for International Development, Raytheon, Morrison Knudsen, GTE, REOL, General Electric, Toman, Aydin, MTS, Black & Veatch, AUC, Amoun, CEL, MKN, Lucent, Arab Engineering, ECG, Concord International, Orascom, Parsons, OSAF, CIB, Giza Cables, CDM, Artoc, EPS, and ECI.

With over 100 guests in attendance, it is not possible to print all of the wonderful photos taken, but we hope you will enjoy the collage presented below.

The entire K&M-Egypt staff joined in hosting a well-attended and enjoyable reception. It proved a valuable opportunity to make new acquaintances, put a name to a face, or simply recognize the contribution each participant is making toward growing the economy in Egypt.

"We at K&M are honored by the participation by representatives of our Egyptian clients, colleagues, and other friends at this welcome reception -- including many who set aside other important activities to attend. Their courtesy reinforces our commitment to provide them with the outstanding services which they deserve and have come to rely upon," remarked K&M senior vice president Bill Drotleff.



In The News continued

JORDAN

K&M Jordan BOT Consulting Project

Reuters
"Jordan First Private Power Plant Award in November 1999" May

Middle East Economic Digest
"First Private Power Plant Could Grow to 450 MW" May

Middle East Economic Digest
"Private Capital Plugs in to Arab Power Projects" February

Middle East Economic Digest
"Bidders Await Private Power Tender" February

KOREA

Korea Herald
"Ssangyong to Build Power Plant with Foreign Capital: K&M/KMR/Marubeni Sign MOU" June

Financial Times
"Ssangyong to Build Own Plant" June

VIETNAM

K&M Phu My II, Phase II BOT Consulting Project

Global Power Report
"Six International Groups Submit Bids for 450-650MW Vietnam Project" April

Viet Nam News
"Six bid for BOT Power Project" April

Power Economics
"Vietnam to Issue Tender Documents for Private Sector Project" January/February

AWARDS/RANKINGS

Engineering News-Record
Top 100 Construction Management Firms—
K&M #46, June

Hispanic Business
Top 50 High Tech Hispanic Firms—
K&M 42, July/August
Top 500 Hispanic Firms—
K&M 242, June

Independent Energy
"1997 Financial Rankings—
Energy and Power Infrastructure"—KMR Power Corp.,
March

S P E A K E R S B U R E A U

K&M/KMR executives participated in a variety of conferences, seminar roundtables, power delegation briefings, meetings and presentations. This offers opportunities to exchange ideas and share important experiences with counterparts, project developers and government officials throughout the world.

K&M Launches Brown Bag Lunch Series

In May, K&M initiated a series of informal brown bag lunch discussions, open to all K&M employees, that highlight case studies of on-going projects presented by project managers.

Organized by K&M senior financial analyst Maria Alessandri, these popular and well-attended luncheons have prompted lively and frank discussion about a wide range of projects that K&M is managing throughout the world in a broad range of sectors.

In May, John Kuspa presented a discussion of the BOT consulting project in Jordan, and John Rezaiyan gave us an overview of the Sector Analysis and Reform project in Ecuador.

In June, Henry Steingass presented case studies in Contract Negotiation highlighting K&M's projects in Tunisia, Côte d'Ivoire, and Togo, Bill Drotleff gave an overview of the KEPCO Illijan project in the Philippines, and Loren Rodwin discussed the Cavite Water project also in the Philippines.

All agreed that the forum was a valuable opportunity to share information about K&M projects with employees outside of the project team as well as present lessons learned that can be applied to future projects.

July

George Stockton, speaker
Foreign Service Institute
"Overview of International Project Development: Conception through Financial Closure"
Sponsor: Business Council for International Understanding
Arlington, Virginia, USA

Frank Staszkesy, Jr., speaker
WAM/ELWA '98
"Financing of Independent Power Projects in Emerging Markets"
Ghana Chamber of Mines
Accra, Ghana

June

Michael Kappaz, speaker
Global Infrastructure Development
"Allocating Completion Risk for Non-Recourse Project Finance: Regional Focus on Saudi Arabian and Egyptian Power Industry"
Sponsor: Institute for Infrastructure Finance
Sintra, Portugal

William Kappaz, speaker
Korean Power Industry Restructuring and Independent Power Production
"Independent Power Production in Korea: IPP Bid Process"
Sponsor: U.S. Department of Commerce
Seoul, Korea

April

John Rezaiyan, speaker
Sixth Clean Coal Technology Conference
"Clean Coal for the 21st Century: What Will It Take?"
Topic: "Ahmedabad Electricity Company Integrated

Gasification Combined Cycle (IGCC) Project in India"
Sponsor: U.S. Department of Energy
Reno, Nevada, USA

March

Karen Harbert, attendee
The New Latin American Infrastructure Story
Sponsor: The Institute for Infrastructure Finance
Buenos Aires, Argentina

Michael Kappaz, attendee
InterAmerican Development Bank Conference
Cartagena, Colombia

Michael Kappaz, speaker
Power in Asia
Topic: "Independent Power Projects in Asia: From 1990 Through the Millennium"
Sponsor: Financial Times
London, United Kingdom

Marty Tormey, speaker
Power Finance China '98
Topic: "Competitive Bidding Process in Asia and Securing Commercial Financing"
Sponsor: ICM Conferences
Hong Kong, China

February

William Drotleff, speaker
Global Projects Conference
Competition and Infrastructure Financing
Topic: "Clarifying the Key Criteria by Which Governments Evaluate Bids in Order to Develop Winning Cost-Effective Strategies for Bid Preparation"
Sponsor: Global Projects
Paris, France

OSP and K&M Collaborative Proposal for Telecom Egypt

In March, K&M-Egypt hosted a seminar for the network planning proposal for Telecom Egypt at the Pyramisa Hotel in Cairo, with participation by over sixty individuals.

The seminar kicked off with welcoming remarks by K&M marketing director George Stockton, who previously held the position of resident manager for K&M-Egypt, and introduction of organizations related to the project, a general view of each organization and the project structure.

Following was a presentation by Dave Smith, OSP Manager, outlining scheduled milestones and how they could meet Telecom Egypt's needs. Then Ned

Network Planning Seminar



Left to right: Dave Smith (OSP manager), Hassan Abd Allab (proposed P.H. in Cairo), Yasser Bajan (proposed management supervisor), Ned Henson (MapCom)

Henson from MapCom explained the company's M4 Mapping product and how it can be utilized to serve the system.

A workshop was held on the second day which gave Telecom Egypt employees an opportunity to discuss details pertaining to the application of the technology to the system.

MEET OUR MANAGERS

As we honor the 5th anniversary of our K&M-Colombia office, it is fitting to pay tribute to the K&M manager who has so successfully overseen a growing portfolio of projects and activities in that country.

José Kappaz, an attorney, businessman and professor, joined K&M in 1992 at the launch of the **100 MW Mamonal I and II Power Projects**. As general manager of K&M Servicios Técnicos (Colombia), Ltda., Mr. Kappaz's extensive legal and administrative background proved extremely valuable as the company developed the first privately financed non-recourse power plant in Latin America. This project set the legal and regulatory framework for other independent power projects to follow in Colombia. Mr. Kappaz was instrumental in managing the Colombia side of activities leading to financial close of the transaction.

As construction began, he provided logistical support for the construction activities and served as in-country liaison to the project developer, KMR Power, during the start up and operation phase. Upon completion, Mr. Kappaz continues to oversee the operation and management contract for the Mamonal I and II Power Plants.

Since 1995, Mr. Kappaz has also been involved in the development of two new power projects, the **240 MW Termovalle Power Project** in Cali, and the **330 MW Termocandelaria Power Project** in Cartagena (profiled on pages 6-7).

In addition, he has served as legal representative to KMTel, assisting the newly formed company, **Caribetell**, to develop a new digital telecommunications system in Cartagena. Caribetell (profiled on page 7) is the first private telecommunications company to be launched in Cartagena.

Over the past five years Mr. Kappaz has been a frequent speaker at major international project development conferences presenting a case study of the Mamonal project, and has published essays on

private law and high level management practices.

As K&M and KMR have developed additional projects in the power, telecommunications and water sectors in Colombia, Mr. Kappaz has been a valuable asset to those efforts. And, his contributions to the local business community are significant. He is active in several organizations that are working to develop a strong, private sector driven economy in Colombia. He is a member of the Asociación Nacional de Industrias, Cámara de Comercio Colombo Americana y Cámara de Comercio de Cartagena, and a special representative of the Generadores Privados al Consejo Nacional de Operación Energética.

Prior to joining K&M, Mr. Kappaz was a senior corporate executive, private practice attorney, independent businessman and professor.

From 1984-1992, Mr. Kappaz was the Administrative Division Chief and Head of the Law Department for Comfenalco Corporation, a private benefits provider to over 2,000 affiliated companies serving 15,000 employees. Benefits included medical, education, transportation and day care. He was also in charge of the education division, a program serving over 10,000 students.

Mr. Kappaz practiced civil and commercial law from 1978-1984 when he represented national and multinational businesses, banks and financial institutions. From 1970-1978 he was the owner of men's clothing and shoe stores as well as a partner in a construction materials company. In addition, he was a professor private law for ten years at the universities of Cartagena, Technology and Jorge Tadeo Lozano.

He received his doctorate in law from the University of Cartagena, and has completed post-doctoral studies in business administration and international law.



JOSE KAPPAZ
General Manager
K&MST, LTDA.
Cartagena, Colombia

AREAS OF SPECIALIZATION

Legal Advisor

Project Management

Operations & Maintenance

Quality Control

"José Kappaz was a true pioneer in Colombia for the Mamonal project. His record of success continues with Termovalle, Termocandelaria and Caribetell. His dedication, honesty and leadership are an outstanding example of what K&M is all about," remarked K&M chairman Michael Kappaz.

Interamerican Development Bank Annual Meeting

Mr. and Mrs. Michael Kappaz with long-time friends, Mr. and Mrs. Richard Frank at the Inter-American Development Bank meeting in Cartagena, Colombia.



Left to right: Chafica Kappaz, Richard Frank, Michael Kappaz, and Irma Frank.

K&M Chairman Meets with President

In July, K&M chairman Michael Kappaz, met with newly elected Colombian President Andres Pastrana. As part of a delegation representing the Colombia Business Partnership, Mr. Kappaz participated in a discussion regarding the business, investment, and security environment in Colombia.

With a new administration in place, it appears that prospects are very good for lowering the level of violence in Colombia that has greatly impacted business decisions and operations over the past decade.

EMPLOYEES : OUR MOST VALUABLE ASSET

K&MWASHINGTON New Hires

Dominique Masse
Financial Analyst

Ronald (Ron) A. Nestor
Manager of Human Resources

Donald L. Purka
Financial Analyst

Diane Carlson
Senior Secretary
(Transfer from KMR)

Pamela M. Howard
Records Management

K&MWASHINGTON Promotions

Lenoid Golbin
Chief Mechanical Engineer

K&MEGYPT New Hires

Romeo Velasco
QC Manager
Port Said Project

K&MCOLOMBIA Five Year Awards

José Kappaz
General Manager

Rafael Arrieta
Driver

Tarcila Gómez
Office Assistant

KMRPOWER New Hires

Denis M. Slavich
Vice President and
Chief Financial Officer

Maybelle M. Leszczuk
Senior Accountant

Kurt R. Reuman
Financial Analyst

Elizabeth Konrad
Executive Assistant

KMRPOWER Promotions

Wanjiku Njuguna
Project Accountant

Maggie Tram
General Ledger Clerk