K&M NEWS
K & M Engineering and Consulting Corporation
June 1999

Termovalle Achieves Commercial Operation

In December 1998, KMR Power's latest private power plant successfully reached commercial operation. The 240 MW Termovalle Project, located in Cali, Colombia, represents a series of "firsts" for KMR.

Termovalle is widely recognized as the first major emerging markets, PPA-based independent power project to be implemented without any government guarantees.

The project utilizes Seimens-Westinghouse 501F gas turbine technology. It serves the power needs of Empresa de Energía del Pacífico (EPSA), one of Colombia's largest utilities, under a 21 year power purchase agreement (PPA). Under the PPA, Termovalle supplies EPSA with 140 MW of power; the remaining capacity and associated energy will be sold to other companies in the area, on the open pool system (Bolsa), or to EPSA.

240 MW Termovalle I oil/gas-fired, combined-cycle plant utilizing 501F technology

KMR Termovalle Operations Manager Denis King (left) and Termovalle General Manager Wilson Negrete (right), overlooking Washington horizon

K&M Engineering served as Owner's Engineer on this project. Construction was completed by affiliates of the Marubeni Corporation of Japan under a turnkey EPC contract. Operations and maintenance services are being provided by North American Energy Services Company. Fuel supply and transportation is being provided by Colombia's Ecopetrol.

The Termovalle project was financed with 75% debt and 25% equity. The Chase Manhattan Bank and Fuji Bank provided the construction financing with the term debt provided by the Inter-American Development Bank (IDB) and Financeria Energética Nacional (FEN), the Colombian government entity responsible for the promotion and financing of investments in the Colombian energy sector. Chase Manhattan Bank, Sakura Bank, Bank of Tokyo, ABN-AMRO, Marubeni Leasing and Fuji Bank participated in the IDB "B" loan.

Termovalle's construction financing was unprecedented in Latin America. It was achieved through an underwritten commitment for 100% of the project's debt requirements, and it was fully in place prior to bid submission.

KMR Power and Marubeni are the project sponsors. FPL International and Scudder Latin American Power Fund also have an indirect interest in the project.

In early December, the Termovalle staff, headed by KMR Operations Manager Denis King and Termovalle General Manager Wilson Negrete, visited the office of the Mayor of Palmira Valley to receive a commemorative award. Mayor Jose Antonio Calle Forero presented Official Decree No. 791 praising Termovalle's contribution to the region's energy sector and industrial growth. The Decree noted "with great pride that the Palmira community counts on a multinational firm of recognized vocation and leadership in the area of generation and commercialization of energy." It also praised the Termovalle team for its "pro-business development work, generation of productive employment and application of clean technology, which results in low environmental impact." (See photos page 2.)

Termovalle Project team meeting at KMR Power headquarters in Arlington, Virginia

"KMR is proud to continue its tradition of success in Colombia with the Termovalle Power Project," commented George Kappaz, KMR's President and Chief Executive Officer. "As a company, we are dedicated to the bright future of Latin America and look forward to providing clean, safe, efficient electric power to Colombia for years to come."

For further information, contact KMR Communications Director Julie Kennon at KMR Power or K&M Project Manager Riad Khalil at K&M-Washington. ■

See Termovalle page 2

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Termovalle Receives Condecoration from Mayor of Palmira Valley

(Top Left) Termovalle Project Team at commemoration ceremony

(Bottom Left) KMR Termovalle Operations Manager Denis King (2nd from left) with Palmira Valley Mayor Jose Antonio Calle Forero (3rd from left), and the mayor's assistants

(Right) Termovalle General Manager Wilson Negrete receives condecoration from Palmira Valley Mayor Jose Antonio Calle Forero

Termovalle Employees and Familes Tour Newly Commissioned Plant

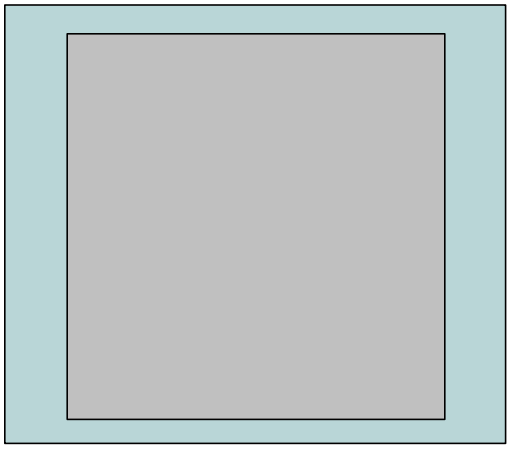
Termovalle project employees and their families visit "Miracle Lord" monument in Buga, Cauca Valley to give thanks for successful completion of power plant

"Family Day" at the newly completed Termovalle Power Plant. Employees and their families were treated to tour of the facility.

K&M Awarded Feasibility Study for Mauritius IPP

K&M was selected by the Government of Mauritius, Ministry of Public Utilities, to conduct a feasibility study for development of a private power facility. K&M will lead a project team consisting of Kuljian Corporation of Philadelphia, Pennsylvania and Servansingh Jadav & Partners Consulting Engineers Ltd. (SJP) of Mauritius to structure the technical, commercial, and financial components of the project.

The feasibility study, funded by the U.S. Trade and Development Agency (USTDA), is expected to be completed by the third quarter of 1999. It will assist the Ministry of Public Utilities and the Central Electricity Board to determine the project's location, most appropriate technology, optimal size, fuel source, and associated transmission requirements. The first phase of the project has a target completion date of 2003.



The proposed plant, the largest to be developed in Mauritius, will be the first international competitively bid independent power project (IPP) for this island nation. Located in the Indian Ocean east of Mozambique, Mauritius has no indigenous fossil fuel sources. The new plant will help the country to meet demand growing at 8-10% per year due to Mauritius' expanding industrial base and service sector.

K&M will provide a project team with an extensive background in IPP project structuring and financing, engineering, design, construction management, and operations. "We are excited about the opportunity to assist Mauritius to expand its power generation capacity. The country's investment environment is one of the most stable in the region. It is our goal to provide the caliber of advisory services that will assist Mauritius to structure a project that will attract leading international developers," remarked K&M Technical Director and Project Manager, Martin Tormey.

"Worldwide investment in the power sector is growing exponentially and U.S. businesses are uniquely positioned to provide top-quality technology, equipment and services to meet this growing need," said John Richter, USTDA's Director for Africa and the Middle East. "USTDA is pleased to provide this grant to simultaneously support the development of this IPP and to promote U.S. exports."

Kuljian Corporation is a multidisciplinary architectural engineering firm with extensive experience in energy and power plant engineering.

Servansingh Jadav & Partners Consulting Engineers Ltd. is a Mauritian engineering firm with civil and environmental engineering experience.

For further information contact K&M Technical Director Martin Tormey at K&M-Washington. ■

KMR Power Consortium Announces EPC Award for Ghana Project

KMR announced in April that a consortium comprised of SK Engineering and Construction Co., Ltd. and Samsung Corporation (both of Korea) had been selected as "prime candidate for award" to perform the turnkey supply of engineering, procurement and construction services for the Ghana Industries Power Project.

The award followed a competitive tender involving bids from a group of prominent EPC contractors and turbine suppliers. KMR will begin EPC Agreement negotiations immediately.

The Ghana Industries Power Project is a 220 MW combined-cycle, gas-fired project currently in an advanced stage of development with the KMR Power-led consortium, which also includes Emerging Power Development, Ltd. (EPDL) of the United States.

The KMR/EPDL consortium was awarded the right to build, own and operate the plant in November of 1997. The principal power purchasers will be Ashanti Goldfields, one of the largest gold mining companies in Africa, and the Electricity Company of Ghana, which will onsell most of the energy to the Minergy Partnership, a group of several large mining and industrial companies.

The project is an important step in the Government's efforts to promote development of private power in Ghana and is critical to the economic development of the country.

This plant will represent the first privately financed IPP in Ghana and will provide long-term, cost-effective power to the mining and industrial sectors.

KMR Power President and CEO, George Kappaz, praised the SK/Samsung team for their success. "We were impressed with this consortium's bid and dedication to our groundbreaking project. KMR is committed to Ghana and we are pleased to be building a strong team to help us achieve our goals."

For further information contact KMR project manager Frank Staszesky, Jr. ■

K&M In the News

COLOMBIA

TERMOCANDELARIA PROJECT

"KMR Power Developing TermoCandelaria Merchant Power Plant in Cartagena" Private Power Executive January, February

"TermoCandelaria to go Online in '99" South America Report November

"Westinghouse Wins Colombian Contract" Power Economics November

"314 MW Plant to be Built at Cartagena" Modern Power System November

"K&M 300-MW Merchant Sells to Spot Market" Gas Turbine World November-December

"KMR's 314 MW TermoCandelaria in Colombia to Use Siemens Westinghouse Turbines" Global Power Report October

GENERAL

"K&M/KMR Executive Profile" Feature/Cover Story Private Power Executive January/February

"K&M to Make Fact-Finding Trip to El Salvador" Business News Americas April

"Financing Cleaner Asian Power" Conference Report Global Private Power January

"Riyadh set to host 2-day workshop on IPPs" Arab News November

K&M In the News

GHANA

GHANA INDUSTRIES PROJECT

Project Finance International February

Africa News February
"Two Consortia Seek Financing for Ghana Power Projects"
Institutional Investor Emerging Markets Week February

"Electricity May Be The Pulsing Heart of African Cooperation"
Electric Power International Winter

Petroleum Economist December

"Energie Les Américains à laide du Ghana"
Jeune Afrique Economie November

WEST AFRICA PIPELINE PROJECT

"Multi-country Gas Gathering Line Could Attract Industry"
Offshore February

"Gas Pipeline to Bring Investment to West Africa"
Oil Online December

"Last Obstacles to West Africa Gas Pipeline"
Africa Energy & Mining

Philippine's 1,200 MW Ilijan Project Starts Construction

Korea Electric Power Co. (KEPCO) announced construction start-up for its 1,200 MW private power project under development near Bantagas, Philippines. The Philippines state utility, National Power Corp. (NAPOCOR), recently issued approval to move forward with construction in anticipation of full financial closure by summer 1999.

Since 1997, K&M has served as owner's engineer and overall technical advisor to KEPCO for the Ilijan project. K&M's multi-faceted work has involved engineering, advisory and negotiation assistance for this pioneering Philippine IPP. Specifically, K&M assisted KEPCO to review and negotiate its Energy Conversion Agreement (ECA) with the Philippine National Power Corp. (NPC), as well as negotiations for the Engineering, Procurement and Construction (EPC) contract with the project's EPC consortium, led by Raytheon Engineering of the United States. K&M also coordinated the risk mitigation components between the ECA, EPC and fuel supply contracts.

MHI 501-G Gas Turbine

The new Ilijan facility, to be located 75 miles south of Manila, is a centerpiece power sector investment in the country's new $4-5 billion Philippines Gas Project currently under development. Ilijan not only will become the country's largest power plant, but the largest combined-cycle plant in Asia. It also incorporates the first use of advanced turbine technology (MHI 501-G) in the Philippines.

K&M performed technical due diligence on the advanced turbine (MHI 501-G) and prepared a report for inclusion in the Project Information Memorandum (PIM).

The Ilijan project also consists of associated transmission lines, interconnection facilities and an onshore gas supply pipeline.

KEPCO's Philippine affiliate, Kepco-Ilijan Co. (KEILCO) currently holds a majority equity interest in the project. Additional equity partners are Mitsubishi Corp. and Kyushu Electric Co. both of Japan. KEPCO is bringing in additional partners to split its share. Southern Electric Philippines, the local subsidiary of Hopewell-Hong Kong, (previously Consolidated Electric Power of Asia), which in turn, is owned by Southern Electric of the U.S., has expressed an interest in equity participation.

KEPCO is negotiating with three major export-import banks, representing the United States, Japan and Korea to provide the majority of the project's debt funding. In May, KEPCO announced it had formalized agreements with Japan and Korea, and was awaiting final approval by the U.S. Additional negotiations are ongoing with a consortium of U.S., European and Asian commercial banks for the remaining funds.

KEPCO has secured the commitment for a "Letter of Comfort" from the Government of Korea, which will facilitate the release of loans for the project. A "Letter of Comfort" works similar to a government guarantee, but does not expose the signatory to risk in case of default. Although the Government of the Philippines policy in recent years has been to discontinue guarantees to BOT projects, NAPOCOR offered an agreement with lenders giving assurances of its backing for the project which will boost the project's success in securing financing.

The Ilijan Power Project is a critical component of the country's fuel diversification strategy. Historically, the Philippines has relied on imported oil, geothermal and hydro, and more recently coal. New high-quality offshore Malampaya gas fields are being developed by Shell Philippines Exploration BV (Spex) that will be supplied through a new 500-km pipeline. In early-April, NAPOCOR announced award for construction of the pipeline to a joint venture between Ecco Asia of the Philippines and Nacap of the Netherlands. The target date for completion of the offshore pipeline is late-2001. The associated 15-km onshore portion of the pipeline is currently out for bid**.**

The new gas-fired Ilijan facility will help launch the country's natural gas industry under development since 1993. From 1994 to 1996, K&M assisted the Philippines to develop the institutional and regulatory setting for the new natural gas industry as well as to analyze the economics of various gas development options. This advisory work was completed on behalf of the Energy Sector Technical Assistance Project funded by USAID. "As the anchor of the Philippines' important Gas Project, Ilijan's realization represents for K&M a satisfying culmination of almost five years work," remarked K&M project manager Henry Steingass, who served as Resident Advisor during the course of the USAID assignment.

Ilijan is being developed on a 20-year BOT basis under an Energy Conversion Agreement (ECA), rather than a traditional Power Purchase Agreement (PPA). Under an ECA the utility provides fuel at no charge, the operator converts the fuel to electricity then delivers it back to the utility for distribution to the grid. The operator receives a capital recovery fee from the utility for the available plant capacity.

The Government of the Philippines agreed to take on the fuel supply risk in order to facilitate development of the Malampaya gas fields, which required approximately a 3,000 MW base load generation commitment in order to make drilling operation feasible. (Two other projects near Manila will supply the additional 1,800 MW.) Once capital costs have been recovered from the initial gas field development, fuel prices are expected to drop and open the sector to further development in the Philippines.

The EPC contractor, Raytheon Engineering of the United States, announced in mid-April that it will commence construction of the power plant immediately, with commissioning expected by 2001 and commercial operation by 2002. "It is an important undertaking for the Philippines as it moves forward to meet the country's growing need for power," said Robert Zaist, senior vice president of Raytheon's Power Group. "Raytheon has a long relationship with KEPCO in Korea, and we look forward to working together to make this project a success for the Philippines." **(CONTACTED ZAIST by fax 4/26 TO GET**

K&M Profiles Sixty Energy Project Opportunities at World Power Conference

In May, the U.S. Trade and Development Agency (USTDA) hosted, in cooperation with the U.S. Department of Energy and U.S. Department of Commerce, The World Power Conference: "Lighting the Globe for the 21st Century." This major international conference showcased sixty power projects valued at $15 billion that are expected to be developed over the next eighteen months.

K&M was selected by the USTDA to prepare project profiles representing leading opportunities in the energy sector under development in Asia, Central and Eastern Europe, former Soviet Union, Latin America, Middle East, North Africa, and Sub-Saharan Africa. These profiles were included in the conference briefing book that was disseminated to attendees. Profiles highlighted project time lines, procurement needs, equipment lists, and key contacts. (Profiles were also made available on compact disk).

This was the product of extensive research and investigation of viable opportunities. In February, K&M staff travelled to dozens of countries in the profiled regions to verify and update data, and meet directly with representaties in energy ministries, regulatories agencies, and utilities as well as the private sector. This effort yielded 60 projects representing sound opportunities for U.S. private power developers, equipment vendors, consulting companies and the financial community.

Project sponsors were invited to present details of the projects and be available to meet directly with interested U.S. company representatives. One-on-one meetings were also arranged with government utility officials, financial institution representatives, suppliers of goods and services, and prospective teaming partners.

USE SPINE FROM BRIEF-ING BOOK AS GRAPHIC IMAGE HERE

Conference speakers included senior-level representatives from U.S. Government agencies active in the promotion of export opportunities for U.S. businesses, including USTDA Director Joseph Grandmaison, Department of Energy Secretary Bill Richardson, U.S. Export-Import Bank Chairman Jim Harmon, and Overseas Private Investment Corporation Director George Muñoz.

In addition, K&M presented three speakers including Chairman and CEO, Michael Kappaz, who moderated the panel on "Energy Privatization in Emerging Markets;" Project Manager, John Rezaiyan, who spoke on "Structuring and Financing Clean Coal Technologies;" and Project Manager, Henry Steingass, who presented the recently announced "Mauritius Private Power Project." *(See separate story on page 3).*

Other featured speakers addressed priorities in lending for energy projects, guarantees in risk mitigation, new technologies and alternative energy applications under development, strategic partnerships, energy privatization in emerging markets, and innovative methods used to close projects in today's market.

Held in New York City, the conference attracted more than 300 attendees including developers, financiers, equipment vendors and host country project sponsors.

For further information contact K&M Marketing Manager Karen Harbert Mitchell at K&M-Washington. ■

K&M In the News

December

"West African Gas Line Project Moves Ahead"
Economist Intelligence Unit
December

West African Natural Gas Line Moves Closer to Reality"
Journal of Commerce
December

"West African Pipeline Would Bring New Power Plants, Investment and Jobs to Energy-Short Countries"
M2 Presswire
December

"Ghana: West African Pipeline to Extend to Ivory Coast"
Platt's Oilgram News
November

JORDAN

SAMRA POWER PROJECT

"Thinner Field to Bid for Jordan's IPP"
Middle East Economic Digest
April

"Bids in for IPP Consultancy"
Middle East Economic Digest
February

"Eight Groups Poised to Bid for IPP"
Middle East Economic Digest
December

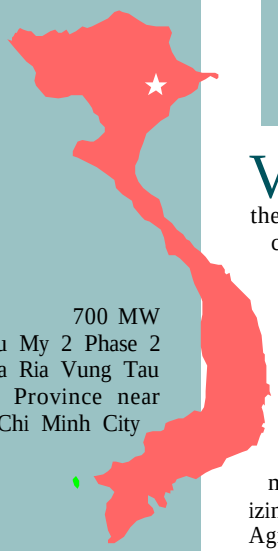
KOREA

SEOHAE ENERGY/ SIHWA COGENERATION PROJECT

"Korea Project to Seek US$160M in Funding"
Institutional Investor Emerging Markets Week
February

"Korea Power Cogeneration Project Opportunities"
International Market Insight Trade Inquiries
January

Vietnam Initiates Negotiations for First Competitively Bid IPP



700 MW Phu My 2 Phase 2 at Ba Ria Vung Tau Province near Ho Chi Minh City

Vietnam's first international competively bid power project reached a milestone in late-January when the Ministry of Industry shortlisted three international consortiums to enter into negotiations to develop the 700 MW Phu My 2, Phase 2 project under 20-year build-own-operate-transfer (BOOT) terms.

The bidders were chosen based a detailed and systematic selection criteria. The leading consortium, headed by Electricite de France International (EdFI) will negotiate a final agreement with the Ministry of Industry, Electricity of Vietnam and Petro Vietnam. For this phase, the Government of Vietnam has selected K&M to assist in finalizing the BOOT contract and the Power Purchase Agreement (PPA).

(Above) Signing ceremony with representatives of K&M Engineering, Electricity de France International, GEC Alsthom, Tokyo-Electric and Sumitomo Corporation

(Below-Left to right) Nguyen Duy Minh, Project Manager, KHM; Eng. Ngo Duc Hanh, Ministry of Industry; Guy Knowle, Project Manager, K&M; Eng. Mai Cong Mung, Ministry of Industry

Should the first-ranked bidder fail to reach final agreement with the Ministry, the two additional consortiums may enter into the process until a successful conclusion is reached.

Since 1996, K&M has served as BOOT consultant assisting the Ministry of Industry (MOI) and Electricity of Vietnam (EVN) to structure the country's first IPP.

K&M evaluated the prequalification documents received by MOI/EVN and recommended the short list of prequalified bidders. K&M also structured the key technical, commercial, financial and legal components necessary to solicit Vietnam's first internationally competitive bid BOOT project. The project attracted a total of six very competitive bids.

K&M performed a detailed evaluation of the bids, out of which MOI/EVN shortlisted the three top ranked sponsors.

K&M drew upon the in-country expertise and resources of legal advisors Phillips Fox and the accounting firm of Deloitte Touche & Tohmatsu. K&M also worked closely with KHM, Inc. as the local experts and agents for coordination of commercial, financial and technical matters within the Vietnamese government ministries, and Power Investigation and Design Co. No. 1 of Hanoi for technical assistance.

The Phu My 2/2 private power project is part of World Bank efforts to promote private sector infrastructure development in Vietnam. The World Bank offered a $75M partial risk guarantee to the project.

The new plant will be part of the 3,600 MW Phu My power complex now under construction in Ba Ria Vung Tau Province, southwest of Ho Chi Minh City.

A decision regarding the proposed fuel supply for Phu My 2/2 is unresolved, but most likely will be secured from unexploited offshore gas fields in the Nam Con Son Basin. Vietnam is pursuing an aggressive strategy to develop new natural gas resources in order to decrease dependence on hydro power which accounts for nearly 65% of current capacity. Concurrent with Ministry of Industry negotiations with the Electricite de France consortium, Petro Vietnam will enter into negotiations to finalize fuel supply agreements.

Development of the Phu My power complex is critical to meeting Vietnam's demand expanding at nearly 13-15% annually. Six projects in the pipeline will add 1,250 MW to the grid by 2000, and future plans call for 14,000 MW by 2010. While 95% of districts and 75% of communes nationwide have access to electricity, nearly 60% of rural households, consisting of 80% of the country's population are awaiting service. In addition, many areas suffer chronic shortages during the dry season. The government plans to spend $1 billion annually through 2005 to meet demand.

For further information contact project manager Guy Knowle at K&M Washington. ■

ILIJAN STORY (continued)

HIS APPROVAL TO USE THIS—taken from Raytheon story in news)

In 1997, the Manila Electric Co. (Meralco) signed an agreement with KEPCO to purchase electricity from the Ilijan facility**.** Meralco distributes nearly 75% of the power requirements in the Luzon grid.

Separate tenders were offered by NAPACOR for the transmission and distribution portion of the project, as well as construction of a substation by 2001 (a year prior to plant operation). In May, NAPOCOR announced ten companies had pre-qualified, with a screening period of 60 days to result in a short list. A two-envelope system (technical and financial) will be used in the international public bidding process. Eighty-five percent of the $130 million, 58 km 500-kV transmission line is being funded through an OECF loan from the Japan**.**

The plant will generate electricity utilizing four MHI 501-G gas turbines supplied by Mistubishi Heavy Industries Corporation. The MHI 501-G combustion turbine is an advanced design, high-temperature, efficient, low-NOx, more powerful machine based on time-proven reliable design concepts. It is the latest in a long line of industrial combustion turbines designed and produced by Mitsubishi and Westinghouse. The new technology risk associated was mitigated by MHI providing several warranties and guarantees in their technology support package to the project company.

"KEPCO is one of the world's most experienced utilities in the operation of state-of-the-art combustion turbine plants," remarked K&M senior vice president William Drotleff.

For further information contact K&M senior vice president, William Drotleff at K&M-Washington. ■

Cote d'Ivoire's First Commercially Financed IPP Reaches Close

The Azito Thermal Power Project achieved financial close in January 1999 for the simple cycle phases 1 and 2 (288 MW). Phase 1 (144 MW) entered commercial operation in mid-March 1999, having begun construction under balance sheet financing in early 1998. The Phase 2 combustion turbine (144 MW) arrived in Abidjan in early May, and is expected to enter commercial operation by 4Q99, capping a rapid development schedule.

Beginning in 1996, K&M served as overall technical and management advisor to the Bureau National d'Etudes Techniques et de Developpement (BNETD), the country's infrastructure planning and privatization agency. K&M included project structuring, bidding, evaluation and negotiation advise. K&M structured key technical, commercial, financial and legal components of the project. K&M assisted in prequalifying the shortlist of bidders, reviewed transmission feasibility studies, prepared the Request for Proposal and draft project agreements, conducted the pre-bid conference, reviewed bid submissions, and assisted BNETD in its negotiations with the Cinergy SA consortium.

Azito's financial close and commercial operation marks a number of important firsts for Côte d'Ivoire, sub-Saharan Africa and the international power industry. It is the largest infrastructure project and private investment in Côte d'Ivoire, and the country's first power sector investment undertaken through full international competitive bidding. Azito is the largest IPP to date and the first international commercial bank financing for a major power project in sub-Saharan Africa. Azito also secured the first-ever partial risk guarantee from the World Bank's International Development Association (IDA), which was critical in attracting the final commercial debt elements to this major private investment.

Cinergy SA, the winning sponsor consortium, led by ABB Energy Ventures and including IPS (Côte d'Ivoire), was selected in June 1997 and began negotiations for the project. The plant will use offshore natural gas as its primary fuel, provided by US oil groups United Meridian International (UMIC, a subsidiary of Ocean Energy) and Apache, and distillate diesel oil as backup fuel. The project includes a parallel transmission component that is being privately financed yet will be owned by the state. Overall the project consists of two ABB gas turbines (model GT13E2), an 11-km 225 kV transmission system, a new substation, and expansion of an existing substation. Electricity will be sold to the state under the terms of a 23-year Concession Agreement, and delivered to the private distribution concessionaire, CIE.

Strict schedule requirements and reorganization of state financing for the transmission sector combined to bring about a very innovative financing plan. Cinergy secured funding from the International Finance Corporation (IFC), which took a lead role in the overall debt facility. Société Générale acted as syndication underwriter for the combined European commercial bank package. Additional funding was secured from a consortium of bilateral and multilateral agencies ***including the Commonwealth Development Corporation (CDC) of the United Kingdom, African Development Bank, Deutsche Investitions und Entwicklungsgesellschaft (DIE) of Germany, and Nederlandse Financierings Maatschappij Voor Ontwickkelingsladen NV (FMO) of the Netherlands.*** Completion of the funding package was announced in late January during the plant's inauguration ceremony.

"K&M is proud of its professional role in helping Côte d'Ivoire realize the Azito project," remarked K&M project manager Henry Steingass.

Contract for Tunisia's First IPP Signed

After extended negotiations, Tunisia signed a contract in March with the U.S.-based PSEG Global consortium to develop the country's first independent power project. The 473 MW Rades II combined-cycle facility will be constructed in the suburbs of the capital city of Tunis by 2001.

Following implementation of Tunisia's private power law in 1996, K&M led the effort on behalf of the Ministry of Industry-Groupe IPP and the national utility, Socíeté Tunisienne de l'Electricité et du Gaz (STEG), to structure key technical, commercial, financial and legal components of the build-own-operate-transfer (BOOT) project.

K&M prepared the prequalification documents, led a project seminar to attract potential developers, prepared the shortlist of bidders and Request for Proposal, reviewed bid submissions, and assisted STEG and the Ministry in selecting the winning bid. K&M also assisted in subsequent negotiations with the PSEG consortium and its lenders. The project attracted keen interest from international developers from the outset resulting in an extremely competitive bidding process.

Electricity will be supplied to the state-owned utility under a 20-year concession and will provide 25-30% of Tunisia's power needs. The combined cycle plant will generate 240 MW from two gas turbines and a 231 MW steam turbine utilizing hot flue gases. Construction is expected to commence by 4Q 1999.

Rades II becomes the third IPP to be developed in North Africa. (Morocco's Jorf Lasfar was first, Egypt's Sidi Krir was second). The Rades project has helped to establish standards of transparency and competitiveness in the Middle East/North Africa power market as it undertakes to add some 2,000 MW per year in private power investment.

For further information, contact K&M project manager Henry Steingass at K&M-Washington. ■

K&M In the News

VIETNAM

(Phu My 2-2 Project)

"Contract for US$400 M Power Plant Won by French"
Vietnam Investment Review
February

Title?? (need to track down copy – reporter talked to Marty)
Vietnam Business Journal
February

"2 US Firms Vie to Build Vietnamese Power Plant"
Journal of Commerce
February

"EDF Wins Share of Vietnamese Power Plant Contract"
European Report
February

"Three International Consortia Shortlisted for Vietnam Power Plant"
Asia Pulse
February

"Bidders Shortlisted for Power Plant"
Saigon Times Magazine
January

"Bidders Shortlisted for Electricity Project"
Viet Nam News
January

"Top-Mark Bidders Selected for US$300 M Power Plant"
Saigon Times Daily
January

Speakers Bureau smd Trade Missions

K&M/KMR executives participated in a variety of trade missions, 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.

April

Michael Kappaz, moderator
"Energy Privatization in Emerging Markets" and "Termovalle Case Study"
John Rezaiyan, speaker
"Structuring and Financign Clean Coal Technologies"
Henry Steingass, speaker
"Mauritius Private Power Project"
World Power Conference
Sponsor: USTDA, USDOC, USDOE
New York, New York, USA

March

Michael Kappaz, participant
Inter-American Dialogue
Latin America and Global Financial Instability:
Outlook for Economic Integration and Social Development
Sponsor: Institute of the Americas
Washington, DC, USA

Michael Kappaz, participant
Economic Policy Forum and Reception in honor of the United States Ambassadors and Charges d'Affaires

K&M Marketing Manager Karen Harbert Mitchell

U.S.-Central American Trade Mission

In late-March, K&M Marketing Manager Karen Harbert Mitchell participated in a U.S. Department of Commerce trade mission to Central America led by Under Secretary of International Trade, Ambassador David Aaron.

The delegation of 16 American companies visited Honduras, Nicaragua, Guatemala and El Salvador to review with senior government officials the priority reconstruction projects in the wake of Hurricane Mitch, which devastated the region in November 1998. Immediate efforts after the storm, the largest disaster to strike Central America, focused on recovery. Attention is now turning to reconstruction. Estimates project nearly $8 billion is required to rebuild.

The Inter-American Development Bank is taking the lead assistance role, with support from the U.S. Agency for International Development, the Overseas Private Investment Corporation, and the World Bank.

The governments of the affected countries will present their reconstruction plans in May, in Stockholm, to the Consultative Group for the Reconstruction and Transformation of Central America, an ad hoc group of multilateral and bilateral donors committed to lending for the rebuilding of the region.

The four-nation trade mission followed a visit by President Bill Clinton in early-March. The Clinton Administration is promoting a $1 billion aid package under consideration by the U.S. Congress. To put into context the American commitment to this effort, this figure exceeds total relief assistance to the region since 1960.

Private sector investors are poised to participate in the infrastructure overhaul through long-term concessions, equipment sales, and construction. The legal and regulatory framework to allow private participation in the infrastructure sector is already in place or imminent in the affected countries.

For further information contact K&M marketing manager Karen Harbert Mitchell at K&M-Washington. ■

European Power Finance '99 Conference

In March, K&M Senior Vice President Willilam Drotleff addressed the European Power Finance '99: Identifying Opportunities and Mitigating Risk international conference held in Rome, Italy.

Mr. Drotleff's remarks, "Analyzing Trends Towards Privatization in the Middle Eastern and North African Power Sector," offered an overview of privatization efforts in infrastructure sectors throughout the region, and focused on the status of specific power projects currently under development.

There is a $6-9 billion per year power sector funding requirement for new infrastructure in the MENA region. Private sector participation will play a greater role in attracting funding in the face of lower oil revenues.

Privatization is gaining momentum with 15,000 MW private power projects now in development. Institutional reform, legislative frameworks and commitment to privatization vary throughout region. Other factors, such as regional grid and gas pipeline interconnections, and fuel supply issues are influencing sector changes.

Individual countries are addressing the need to provide service to growing industrial sectors in a variety of ways. While some are privatizing existing assets, others are implementing hybrid versions of IPP/IWPP projects. Where financing is not the greatest consideration, nevertheless, many countries are seeking the advice of experienced BOO/BOT consultants to assure new projects are structured on a commercially viable basis.

"Despite the present oil price slump, the underlying economy in most of the region's countries is sound. That, coupled with the significant international financing experience of the region, and the energy sector changes underway, will create opportunities for a number of excellent private investment projects in the near future," observed K&M Senior Vice President William Drotleff. ■

K&M Senior Vice President William Drotleff

U.S.-South Korea Trade Mission

In March, K&M Chairman Michael Kappaz was a delegate on the American trade mission to South Korea headed by U.S. Department of Commerce Secretary William Daley. The trade mission was designed to boost American exports to this critical market. The agenda focused on strengthening commercial ties in five key sectors including infrastructure, energy, environment, information, and telecommunications.

During the mission delegates met with government officials, business counterparts, and advocates for U.S. companies participation in selected projects. Specifically, K&M participated in meetings with President Kim, the Minister of Commerce, Industry and Energy, Minister of Construction, and Secretary of State for Trade. Private sector activities included a luncheon hosted by the Korean Chamber of Commerce for business leaders and meetings with Korea Gas and Korea Electric Power Company.

Opportunities to partner with South Korean firms are opening to American firms as the country initiates privatization of its energy sector. The Government of South Korea has announced an ambitious effort to fully or partially privatize five energy related state-owned companies.

K&M is currently serving as Owner's Engineer to Korea Electric Power Company (KEPCO) for its 1,200 MW Ilijan gas-fired plant now under construction in the Philippines. K&M assisted KEPCO to negotiate the ECA and EPC agreements. When complete, it will become the largest facility in the Philippines. The Ilijan project is the cornerstone of the Philippines energy strategy for the future as the country develops its natural gas industry, made possible by discovery of high-grade offshore fields. *(See separate story on page 4).*

In addition, K&M/KMR recently signed an MOU to assist in the development of the 200 MW SiHwa Power Project in South Korea on behalf of Seohae Energy. The coal-fired co-generation project will be structured on an IPP basis. The state-owned utility, KEPCO, will purchase the electricity. KMR Power has an equity interest in the project, while K&M is serving as IPP consultant.

K&M Chairman Michael Kappaz

"This mission laid the groundwork for joint U.S.-Korean business opportunities, and demonstrated U.S. commitment to Korea's future," remarked Secretary Daley.

"K&M/KMR are pleased to offer its extensive technical and financial expertise as the South Korean energy sector is privatized and joint project opportunities evolve," noted Michael Kappaz. "We have great deal of experience in structuring sound projects throughout the world that attract the highest caliber of sponsors. I am confident that South Korea is on the road to recovery and poised to expand private participation in its power sector." ■

World Economic Forum - MENA Business Initiative

In February, K&M Chairman Michael Kappaz addressed the annual World Economic Forum meeting "Middle East/North Africa Business Initiative," held in Davos, Switzerland. The forum was attended by heads of state, prime ministers, cabinet-level ministers and CEOs representing the private sector.

Mr. Kappaz's remarks, "Global Investment, Local Concerns: Exploiting New Infrastructure and Trade Financing Mechanisims," focused on sound project fundamentals and risk mitigation strategies inherent in a successful project.

He served on a panel that included OPIC President and CEO, George Muñoz; United Technologies Corp. Senior Vice President, Ruth Harkin; Palestinian Economic Council for Development and Reconstruction Managing Director, Mohammad Shatyyeh, and Jammal Trust Bank (Lebanon) Chairman, Ali Jammal.

K&M has a strong base of experience structuring pioneering private power projects in emerging economies throughout the world. Project fundamentals successfully implemented in the energy sector are now being adapted to other industries. With new infrastructure development opportunities opening to private investment throughout the Middle East it is timely to address the key elements that will attract international participation. Project development in the region must take into consideration a wide variety of asset and funding requirements to meet local needs.

In light of increased international investment opportunities opening to the private sector in the region, a concensus was reached to create the Middle East Business Council to coordinate World Economic Forum MENA activities. ■

K&M Chairman Michael Kappaz with Palestine Authority Chairman Yasser Arafat at Davos

Speakers Bureau and Trade Missions

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Washington, DC, USA

William Drotleff, speaker
European Power Finance: Identifying Opportunities and Mitigating Risk
"Analyzing Trends Towards Privatisation in the Middle Eastern and North African Power Sector"
Sponsor: Worldwide Business Research
Rome, Italy

John Rezaiyan, speaker
US-Brazil Clean and Advanced Power Systems
"Structuring Procurement of New Advanced Coal Technologies"
Sponsor: Southern States Energy Board
Florinanopolis, Santa Catarina, Brazil

Loren Rodwin, speaker
Western Hemisphere SCO Roundtable on Infrastructure Industries and IPR
"Structuring Successful Water / Wastewater Projects in Latin America"
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Miami, Florida, USA

George Stockton, panelist
Asian Energy Roundtable Discussion
Power Sector Panel representing engineering, prcurement and construction firms
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Speakers Bureau and Trade Missions

February

Michael Kappaz, speaker
Middle East/North Africa Business Initiative
Global Investment, Local Concerns: Exploiting New Infrastructure and Trade Financing Mechanisms
Sponsor: World Economic Forum
Davos, Switzerland

George Kappaz, Denis Slavich, participants
"Natural Gas and Global Energy"
Executive Forum
Sponsor: Cambridge Energy Research Associates
Houston, Texas, USA

December

Michael Kappaz/ George Kappaz, co-hosts
Business Council for International Understanding
Roundtable Luncheon Discussion with Colombian Ambassador Moreno-Mejia
Sponsor: KMR Power Corporation
Washington, DC, USA

William Kappaz, speaker
Andean Energy '98: Opportunities in Andean Energy
Managing the Political and Financial Risk of Andean Projects
"Project Structure: The Key to Risk Mitigation in the Andean Region"
Sponsor: Center for

K&M Advanced Fuel Technologies Expert Addresses Clean Coal Roundtable

John Rezaiyan presents clean coal technologies overview

In March, K&M project manager, John Rezaiyan made a presentation to the U.S.-Brazil Clean and Advanced Power Systems Conference. In his remarks, "Structuring and Procurement of New Advanced Coal Technologies," Mr. Rezaiyan gave an overview of the project structure required for financing clean coal projects.

Since 1991, K&M has completed over 40 engineering and technical projects relating to a variety of new energy technologies, marketing, financing and other issues for the U.S. Department of Energy, Federal Energy Technology Center.

Mr. Rezaiyan's remarks focused on K&M's experience in the area of clean coal technology (CCT). He compared the specialized project structure required for a CCT, versus a conventional project structure. While many of the key elements of competitive bidding and procurement remain the same, CCT projects require special attention to the technical support package.

Brazil is seeking to diversify its energy sector through development of new coal-fired power plants. The country recently experienced blackouts in certain parts of the country and must find new ways to meet a predicted 6-8% annual growth in demand. Nearly 90% of Brazil's current capacity relies on hydropower to generate electricity.

The conference brought together U.S. and Brazilian engineers, developers, utility and government officials and investors interesting in enhancing opportunities for the use of clean coal technologies and advanced power systems in Brazil.

Four Brazilian coal companies are currently considering construction of mine-mouth, coal-fired plants utilizing clean coal technology.

For further information contact K&M project manager John Rezaiyan at K&M-Washington. ■

Trade Magazine Profiles K&M and KMR

The January/February 1999 issue of Private Power Executive magazine, published by Pequot Publishing of Connecticut, featured a five page profile of K&M and KMR.

Private Power Executive is one of the industry's premier publications covering the global electric power industry.

PPE's editor, Joseph McDonald, travelled to Washington, D.C. to interview K&M/KMR executives.

"K&M/KMR have successfully combined the individual skills and expertise of their separate companies into a formidable international power development organization," observed McDonald.

The article traced K&M/KMR's origins in 1987 and 1993, respectively. Initially K&M leveraged two things: sound technical expertise of engineers and construction managers with extensive experience in the power sector; and a thorough understanding and affinity for the complex financing instruments and risk mitigation strategies required.

KMR built upon the success of the Mamonal Power Project that gained wide international recognition as the first non-recourse financed greenfield private power project in Latin America.

K&M chairman Michael Kappaz stressed that "adherence to sound project fundamentals has helped his organization to carefully select projects with the strongest potential for success."

Looking to the future, Kappaz envisions the K&M group of companies expanding its equity investments beyond the electric power sector to encompass water and wastewater systems, advanced environmental technologies, and telecommunications.

Reprints of the original article are available upon request by contacting K&M News editor Linda Ivanov at K&M-Washington. ■

K&MST-Colombia Hosts Luncheon for USTDA Country Manager

K&MST hosted a luncheon in February at its Cartagena offices in honor of U.S. Trade and Development Agency Country Manager for Latin America and the Caribbean, Gabriella Rigg.

Also in attendence were Jamie Borda, President, Colombian-American Chamber of Commerce in Cartagena; Diana Lequerica, Executive Director, Colombian-American Chamber of Commerce in Cartagena; Rick Ortiz, Commercial Attaché, Embassy of the United States in Bogota, and Capitán de Navio Carlos Cubillos, Commandant, Cartagena Naval Base.

K&MST General Manager Jose Kappaz presents five year service award to K&MST accountant Rodolfo Rueda

K&M on the World Wide Web

www.kmec.com

K&M announces its entry on the Internet, www.kmec.com. The launch of this website maintains K&M's position as an innovator in the advancement of technology.

The number of visitors to the website, as measured by a "hit counter," has already exceeded expectations. With several improvements in store over the next few months it is anticipated that this website will serve the wide range of "netizens" who take a few moments to peruse its contents.

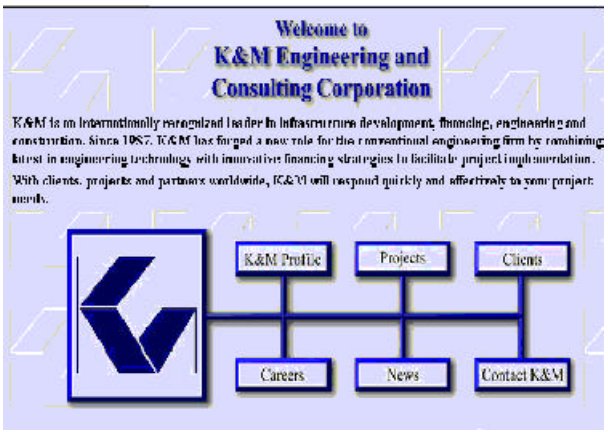
Copies of this newsletter, past newsletters, press releases, project descriptions, corporate qualifications, job announcements, and other frequently requested documents are among the items available for download.

Plans call for offering K&M web documents in several languages, and adding regional profiles.

Conal Duffy, K&M's "Webmaster," is leading the company's efforts to enhance download speeds, improve the variety of content available as well as the media employed.

We invite you to visit www.kmec.com. Any comments or suggestions should be directed to Conal Duffy at cduffy@mailer.kmec.com. ■

K&M Business Development Associate Conal Duffy



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K&M/KMR FIVE YEAR AWARDS

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K&MST-COLOMBIA FIVE YEAR AWARDS

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