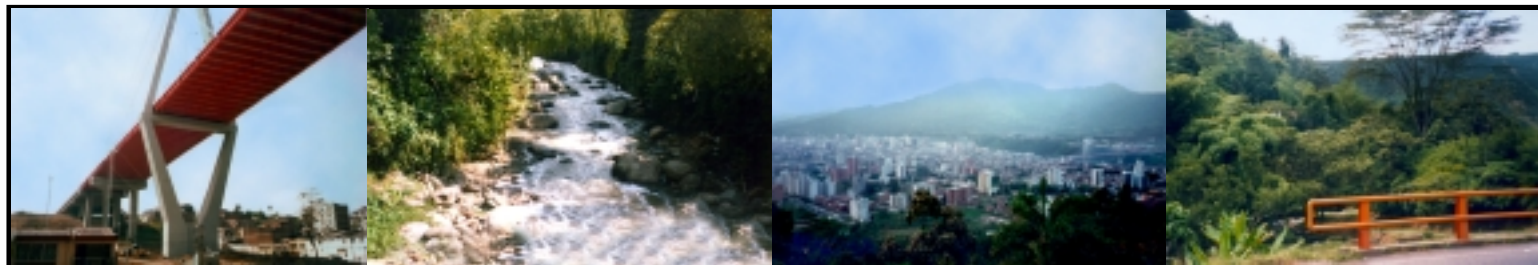


# K&M NEWS

K&M Group of Companies

MARCH 2002



## K&M to Structure Private Wastewater Treatment Project in Colombia



**K&M** has been awarded a consulting assignment on behalf of the water utility for the city of Pereira, Colombia. This 15-month assignment will consist of a technical, economic and environmental feasibility study for construction of a new wastewater treatment plant on a Build-Own-Operate-Transfer (BOOT) basis. The K&M-led project team met in Pereira in November to begin work on the feasibility study, coordinate roles and assign specific tasks to each party and strategize about potential project finance resources.

Funding for the feasibility study phase is being provided by the Japan Special Fund through the Inter-American Development Bank (IDB). The IDB is also providing funding through a credit agreement for the Water and Sewer Master Plan.

Phase II of the assignment includes preparing the preliminary design and specifications of the wastewater treatment plant (including size and technology), drafting the service contract, developing financial models, performing risk analyses, reviewing the institutional, legal and regulatory framework, and preparing the international competitive bid and tender process to attract private investors.

This project is an integral part of the Water and Sewer Master plan of the city of Pereira. The Master Plan seeks to recover the quality of the course water in the area and improve the quality of life of the population. The local sewer system, served through the Empresa de Acueducto y Alcantarillado de Pereira (EAAP), is connected to 92% of the households, but is overloaded by fifty percent. Environmental problems will be addressed through improvements to the local watershed.

While the majority of the Master Plan is being funded through public sources, the objective of the IDB and the city of Pereira is to implement the wastewater treatment plant with private sector resources. Upon successful completion of this BOOT project, the sewage and wastewater that has flowed directly into local rivers for decades, will be treated to environmentally strict standards for the first time ever.



*PROJECT TEAM: Standing left to right: Gustavo Navia, Environmental Expert (Ingesam); Mauricio Millan, Technical Manager and Project Coordinator (EAAP); Sergio Barake, Senior Financial Analyst (K&M Engineering); Alberto Casas, General Manager (MWH-Lima, Peru); Juan Jose Arango, Legal Counsel (Brigard & Urrutia/K&M); Carlos Leonardo Guerrero, General Manager (Ingesam). Sitting left to right: Juan Diego Arango, Advisor to the General Manager (EAAP); Glorinda Inés Acevedo, General Manager (EEAP); Jose Kappaz, Regional Manager (K&M Americas).*

The city of Pereira is pioneering private sector participation in the water sector of the region through this first-ever BOOT water project in Colombia. By offering this project on a BOOT basis, EAAP seeks to attract technical knowledge and financial resources that will result in the provision of cost effective, high quality service to the residents of Pereira, while building the institutional capacity of EAAP and city of Pereira staff.

Leading the project consortium, K&M will perform this assignment together with MWH Américas and Ingesam Ltda. K&M brings to this assignment its broad experience as a pioneer in developing, structuring and financing BOT/BOO projects throughout the world, including the award-winning Mamonal project in Colombia. Mamonal was the first independent private power (IPP) BOT in Latin America and paved the way to two subsequent IPP BOT/BOO projects in Colombia.

In the private water sector, the firm recently completed several independent reviews of wastewater treatment service agreements throughout Western Europe. In addition, K&M completed a feasibility study for the financing and operation of a new 125,000 m<sup>3</sup>/day bulk water treatment plant and associated works in Cavite, The Philippines.

MWH Américas is a subsidiary of Montgomery Watson Harza Global, Inc., one of the world's premier water and wastewater design engineering firms. MWH Global has designed over 1,000 wastewater treatment plants and will manage this project from its Lima, Peru and Florida, US offices.

Ingesam, Ltda., is a local environmental, sanitary engineering and consulting firm based in Cali, Colombia, with over 25 years experience in the sector. Ingesam specializes in treatment and distribution of potable water, residual and wastewater treatment and air quality control.

K&M has established a fully operational local office which will manage the project in liaison with the client, pertinent community stakeholders and the city leadership. For further information contact Project Manager Ralph Fairbanks (rfairbanks@kmec.com) or Senior Financial Analyst Sergio Barake (sbarake@kmec.com) at K&M-Washington.

See PEREIRA page 4

*Fifteen Years of Global Excellence*

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## Message from the Chairman



### Fifteen Years of Global Excellence

**I**n January we kicked off our 15th Anniversary of operations. It has been an exciting fifteen years marked by a number of *firsts*, not only for the company but for the entire power industry.

K&M earned the distinction of developing the first independent power projects on nearly every continent. Its innovative structuring and financing solutions have led to the successful closing of many trailblazing private power deals, including the first non-recourse project financed power projects in Latin America, the Caribbean, Middle East, North Africa, West Africa and South Asia.

Since opening its doors in 1987, K&M has procured, structured, designed, developed and/or managed the construction of hundreds of infrastructure projects. K&M has assisted 50 countries to attract private investment in the power and water sectors. Of the nearly 30,000 MW of power projects in which the firm has been involved, K&M developed and structured 20 IPPs and performed technical/financial reviews, feasibility studies and negotiation assistance for another 30 IPPs.

The firm has successfully participated in every aspect of a private power transaction from developer, investor, financial engineer, technical advisor, owner's/banker's engineer to EPC contractor.

As the BOO/BOT schemes for financing infrastructure proved successful in the power sector, K&M began to work with project sponsors in the water sector. Large scale water/wastewater treatment as well as desalination facilities offer the most promise for adapting these principles.

And, in the telecommunications sector, K&M's largest project to date has been to assist Telecom Egypt in delivering 600,000 new lines to customers utilizing state-of-the-art fiber optic and wireless local loop technologies.

K&M is extremely proud of these pace-setting and unique projects which have delivered new services to millions of people throughout the world. It is gratifying to contribute to an improved standard of living that can now flourish with reliable access to electricity, telecommunications and water.

Reflecting upon the tragic events of 2001, this new year takes on greater meaning. Throughout the world people are examining the quality of their family and work relationships, while pledging to pursue goals that bring true meaning and satisfaction into their lives. As an international firm, the nature of K&M assignments often scatter our employees and consultants across the globe, sometimes in places that pose security problems and the need to be vigilant of potential dangers. We frequently find ourselves in unfamiliar locations for long periods, emerged in a daily routine encountering local customs, languages and food different from our own. While challenging, the experience is also rewarding.

Working side-by-side with host country counterparts, a multicultural gap is bridged, enriching the experience for all. Many K&M assignments involve knowledge and technology transfer, but they also result in lasting friendships and respect for our mutual societies. The world is filled with good people and good ideas. Together they can promote prosperity and improve quality of life. Engineering new infrastructure is not only an academic achievement, but, in a sense, a "cause." Providing new services in the electricity, water and telecommunications sectors, utilizing improved technologies that reduce environmental impacts, are achievements of which we can all be proud. Indeed, significant milestones have been achieved this year on a variety of K&M assignments that will positively impact millions of people as these projects are commissioned and begin providing long-awaited services (see Project Milestones 2001 pages 6 and 7).

None of this would have been possible without the dedication and perseverance of our professional staff, consultants, partners, vendors, and clients with support from a broad spectrum of financial institutions that have contributed to our success and growth.

The future brings new challenges and opportunities, which K&M is ready to meet and exceed.





# K&M Meets With Afghan Reconstruction Delegation

## Afghanistan's Energy Potential

**K&M** attended a luncheon briefing in New York City in January honoring His Excellency Hamid Karzai, Chairman of the Interim Government of Afghanistan. Hosted by the prestigious Business Council for International Understanding (BCIU) at the request of the U.S. Department of State, the event brought together 40 prominent U.S. business representatives and members of the Afghan delegation to discuss immediate and long-term needs. In his remarks, Chairman Karzai called for assistance from the business community to help rebuild Afghanistan's basic infrastructure severely damaged from a generation of conflict.

K&M has broad experience assessing infrastructure priorities, predominately in the power, telecommunications, water and environmental sectors, and strategizing viable plans for attracting financing and project implementation. Specifically, K&M performed a similar assessment in Bosnia-Herzegovina in 1996.

The United States, together with an international coalition, have agreed to assist in the country's reconstruction. A preliminary assessment was published jointly by the Asian Development Bank, World Bank and United Nations Development Program in late-January following the Bonn and Tokyo summits, which will serve as a guideline for implementing these projects.

Water, sanitation and roads are a top priority, with an expanded and integrated electricity grid and telecommunications system at the next level. Restoring existing water and electricity supply will focus on hospitals and key businesses, then private residences.

According to the joint preliminary report a more detailed assessment of physical and institutional needs and constraints is required before proceeding with the development of large-scale investment and policy programs. In the power sector, the most urgent needs include upgrading the transmission network, substation repair, and installing new diesel generators and gas turbines.

William Kappaz, K&M's Vice President and CFO, met with members of the delegation promoting K&M's capabilities in reconstruction and overall power sector reform. "The people of Afghanistan are truly beginning anew," remarked Kappaz. "Power must be restored or brought in to serve the most vital needs on a fast-track basis, while a foundation is created to sustain a long-term, viable power sector that may be supported by the private sector," he added.



ABOVE:  
His Excellency  
Hamid Karzai,  
Chairman of the  
Interim Government  
of Afghanistan

Afghanistan's electric sector is dominated by hydro-power, which accounts for 70% of its 500 MW installed capacity, supplemented by 100 MW electricity imports and small diesels. Its system consists of isolated regional networks. Low output due to a severe drought in 1999-2000 was strained further when U.S. bombing severely damaged the Kajaki dam and its hydro plant. Much of the balance of generation, transmission and distribution assets are in poor condition. Multilateral-sponsored infrastructure projects were put on hold in the 1970s leaving the country in dire need of new facilities. Afghanistan has natural gas reserves estimated at 5 tcf that can be further developed. Annual production is estimated at 90 bcf, of which 10 bcf is consumed domestically and 80 bcf is exported, principally through Uzbekistan to the Former Soviet Union. The country also has an estimated 73 million tons of bituminous coal reserves with limited production. Although oil reserves are estimated at 95 million barrels there is limited production and virtually all petroleum products are imported. Because of its strategic location, potential exists for Afghanistan to become a regional transit route for oil and natural gas through proposed pipelines connecting the Central Asian subcontinent to the Middle East.

## Zambia Energy Delegation Private Power Fundamentals Briefing



**K&M** hosted a full-day briefing on private power fundamentals for the Kariba North Bank Company of Zambia in early December. Co-sponsored by the U.S. Energy Association, through the U.S. Agency for International Development, the delegation visited the United States and Canada on a fact-finding tour to explore how to structure IPPs, finance projects, interact with utilities and regulators, and secure customers. They also discussed ways to improve plant efficiency.

K&M's briefing team covered a comprehensive agenda which included discussions about IPP project fundamentals and project finance fundamentals. The team also presented several representative project case studies utilizing project finance and examined the various contracts and project agreements required in a private power transaction.



Kariba North Bank Company delegation, accompanied by U.S. Energy Association representative, meets with K&M Engineering and Consulting

K&M participants included Senior Vice President William Drotleff, Project Development Manager Philip Hetzner, Corporate Counsel Cindy Shepard and Chief Financial Officer William Kappaz.

Representing the Kariba North Bank Company were Chairman Nicholas J. Kwenda-kwema, Power Station Manager Cosmas Mwenda, Technical Services Manager Matthew M. Lindunda and Financial

Controller/Company Secretary B.M. Chitambala.

Also attending was Senior Program Coordinator Philip Assis of the United States Energy Association's Energy Partnership Program.

For further information contact K&M Senior Vice President William Drotleff at K&M-Washington.

## Vietnam's Phu My 2-2 Licensed

In September 2001, Vietnam issued an investment licence to a consortium of Edf, TEPCO and Sumitomo for the 715 MW gas-fired combined cycle plant. This World Bank-sponsored project was initiated in 1997 with K&M serving as the BOT consultant to the Ministry of Electricity and Electricity of Vietnam to structure and tender an international competitive bid.

Although the Phu My 3 BOT project ultimately leap frogged its financial close and construction startup ahead of Phu My 2-2 by several months, securing the investment licence for this project marks a significant step for the country's power sector. Indeed the process for implementing Phu My 3 (the second BOT attempted in Vietnam) was streamlined by the pioneering work and knowledge transfer gained on Phu My 2-2 by the various Vietnamese ministries and utility officials. Construction is due to begin on the Phu My 2-2 phase in mid-2002 with commercial operation targeted for 2004.

K&M is honored to have played a role in bringing IPP/BOT concepts to infrastructure project development in Vietnam.

According to the World Bank:

- The project, with a total foreign investment of \$400 million, will be among the largest private sector investments for power generation in Vietnam, and after the Nam Con Son gas project, it will be largest private sector investment.

- Phu My 2-2 will provide power at one of the lowest power prices in the world—about 4 cents/kwhr at the busbar inclusive of fuel price.

(continued next page side bar...)

## K&M and TCE Form Strategic Alliance

**K&M** has formed a strategic alliance with TCE Consulting Engineers Limited (TCE), a member of the Tata group of companies of India, to jointly pursue power projects in the United States and selected international markets.

The K&M/TCE strategic alliance will offer a full range of expertise in engineering, procurement and construction of power facilities and systems. The two companies have combined resources of 900 personnel and experience totaling over 60,000 MW power plant capacity in operation or under construction.

"Through this alliance our two companies offer a remarkable depth of expertise and resources in engineering, procurement and construction of power projects that leverage our individual strengths and global presence," remarked K&M Chairman/CEO Michael Kappaz. "At a time of surging energy demand this new alliance offers immediate resources and proven capabilities to power project sponsors and developers as they seek to keep pace with the market."

"The synergies realized by this strategic partnership will propel our companies into aggressively seeking new opportunities and new markets," commented K&M Business Development Manager Frank Staszsky, Jr.

Established in 1962, TCE is one of India's premier engineering consultancy firms. The company offers comprehensive and integrated engineering services in the fields of power (generation, transmission and distribution—including oil, gas, coal/lignite, combined cycle, cogeneration, hydro and nuclear) water supply, sewerage and leak detection and infrastructure (roads, bridges, ports and harbors, hotels and institutional buildings, and town planning). It also undertakes industrial, chemical and petrochemical projects. Its range of services include planning, project reports, basic and detailed engineering, procurement assistance, inspection and expediting, project management, construction supervision and assistance in start-up, testing and commissioning of projects. The company has executed more than 2,500 assignments in India and overseas, with several firsts to its credit. It has ISO 9001 certification and was accredited by LRQA, US in 1994. TCE has offices in Mumbai, Bangalore, Hyderabad, Delhi and Pune.

For further information contact K&M Business Development Manager Frank Staszsky, Jr. at K&M-Washington (fstaszsky@kmec.com).



### Pereira Wastewater Project

Continued from cover page

*City of Pereira*  
*proposed plant site*



Pereira is the capital of the Department of Risaralda located in the coffee region in the west-central part of Colombia at 1,400 meters above sea level. Pereira has a total population of 420,000. Together with the neighboring municipality of Dos Quebradas, approximately 560,000 people rely on the local public water system. They have a 97% (water) and 92% (sewer) rate of connectivity.

It is estimated that Pereira's population will increase at an annual rate of 2% over the next decade. Moreover, the current 27 sq. km. of urban area is expected to grow to 63 sq. km. within the next 15 years. The city's natural water supply is drawn from two major rivers nearby. The Otun River is situated in the northern boundary, while the Consota River crosses the southern end.





## K&M Developing Two IPPs in United States

**K&M** is currently developing for its own account two independent power projects in the U.S. Both projects are 500-600 MW natural gas-fired combined cycle plants located within the East Central Area Reliability Council (ECAR) region of the United States.

One project is located within an existing industrial facility and will be able to take advantage of certain existing services and infrastructure facilities associated with the existing plant. In a true win-win relationship, this project will provide steam and possibly power directly to the host facility. The other project is located on a greenfield site for which K&M has executed an Option and Purchase Agreement.

Over the years, K&M has provided development and financial services to numerous, governments, national utilities and private developers. In addition, through its former affiliate, KMR Power, K&M developed, financed, constructed and operated several power projects in Columbia. Most of these assets were sold to AES at the end of 2000. Shortly thereafter, K&M began developing power projects for its own account, while still maintaining its consulting services business in this arena.

K&M's Manager of Project Development and Finance Phil Hertzner says, "since commencing development activities within the U.S. independent power sector in March of

2001, considerable progress has been made on the two lead projects. Both projects are currently under study by the transmission company serving the areas where the plants will interconnect to the grid with final results of the Phase 1 studies expected by March 2002. Environmental permitting has been initiated, as have discussions for gas transportation, water supply and property tax abatements. K&M has received strong encouragement for both projects from local stakeholders." Hertzner believes both projects have superior competitive properties related to their proximity to all required infrastructure elements, as well as to the market they will serve.

K&M's business plan in this area includes entering into co-development agreements for the projects with strong U.S. or international partners in first quarter 2002. This will allow K&M to leverage its considerable experience and expertise in developing and financing independent power projects while appropriately diversifying across the growing portfolio of projects in its development pipeline. Further enhancing the effectiveness of K&M's Development Group is its ability to efficiently access the full suite of technical engineering services that K&M has traditionally provided to its clients throughout the world.

For further information contact K&M Manager of Project Development and Finance Phil Hertzner at K&M-Washington (phertzner@kmecc.com).

## Ultra-Low NO<sub>x</sub> Emissions Limits

**K&M** provided an independent technical review to the U.S. Department of Energy, National Energy Technology Laboratory, for a Program, Product and Project Engineering and Analysis Services task order completed under subcontract to Energy and Environmental Solutions (E<sup>2</sup>S).

The overall objective of the study was to evaluate the impact of further reduction of NO<sub>x</sub> emission limits on DOE's Advanced Turbine Program.

This assignment entailed evaluating various ultra-low NO<sub>x</sub> emissions reduction technologies, their realistic commercially viable potential, and providing recommended options for consideration by the Office of Fossil Energy. These recommendations were also considered in an inter-agency review of proposed new Environmental Protection Agency regulations.

K&M conducted this independent technical review through interviews with leading gas turbine manufacturers, representatives of the Gas Turbine Manufacturers Association, utility stakeholders and independent power producers. It also conducted a thorough review of trade literature and existing government regulations.

Evaluations examined the viability of proposed NO<sub>x</sub> emission limit reductions in the context of a broader picture, posing the questions "are we inadvertently increasing overall pollution by reducing NO<sub>x</sub> content, which may yield increases in CO<sub>2</sub> and other pollutants? What is the point of diminishing return?"

To go to lower emissions, there are energy, environmental, economic and operational impacts associated with add-on emission controls. Not only are these add-on control systems expensive, but the heat rate increases and the overall environmental impact can be worsened. A comparison of available front-end and back-end technologies showed trade-offs that resulted in higher fuel consumption, excessive fouling of the boiler, corrosion problems, decreased power output, excessive pressure drop and poor parts reliability.

K&M reviewed current EPA policy on NO<sub>x</sub> emissions which allows older coal-fired utilities to operate under different standards grandfathered under the Clean Air Act Amendments of 1990. They not only are permitted to emit higher levels of NO<sub>x</sub> compared to new natural gas-fired plants, but other pollutants (mercury, CO, PM, UHC) as well. Since these older plants tend to have an operational cost advantage (capital investments have been recovered) over more costly newer gas turbines that are forced to achieve ultra-low NO<sub>x</sub> emission targets (2 ppm), utility operators have the option of dispatching electricity from the lower cost units, thereby increasing overall pollution loads. This is ultimately contrary to the goal of pollution prevention and may inadvertently discourage use of newer technologies.

Additionally, K&M pointed out concerns about safety, equipment integrity, the ability to accurately monitor and control NO<sub>x</sub> in the 2 ppm range, as well as the excessively high costs associated with current natural gas turbine technologies capable of reaching ultra-low NO<sub>x</sub> emission levels.

K&M's analysis recommended that the DOE consider supporting several levels of effort, based on the following prioritized action list:

1. Actively support a national effort to rationalize the EPA regulatory system, focusing on devising an approach that meets the law in a more rational manner that also takes into consideration cost-sensitivity issues;
2. Develop guidelines incorporating Life Cycle and Total Costing principles that will assist turbine suppliers, utility operators and EPA to better rationalize investments needed that will both meet the regulations and enable market expansion;
3. Develop and prove reliable NO<sub>x</sub> monitoring instrumentation;
4. Continue to support catalytic head end development;
5. Evaluate advanced combustion stabilization technology for lean pre-mix systems; continued focus on pollution prevention, especially in international forums, to help promote these technologies and their advantages.

## Vietnam's Phu My 2-2 Licensed

(... continued from  
previous page side bar)

• Phu My 2-2 secured the largest (US\$75 million) Partial Risk Guarantee (PRG) operations for an IDA-only country (compared to \$30.3 million in Côte d'Ivoire and \$60.9 million in Bangladesh). Vietnam was one of the six pilot countries selected by the World Bank when the program was initiated in 1997.

The Phu My 2-2 signing will also have major impacts for the country by:

• Providing a new mechanism for mobilizing the large private financing required for the future infrastructure program of the country.

• Laying the foundation for international competitive bidding as the preferred process for large infrastructure sector procurement by demonstrating so clearly the effectiveness and economics involved in ICB.

• Leading to enhanced involvement of the foreign private sector in the infrastructure sector.

• Encouraging a larger IDA PRG program which would become an important tool in mobilizing private investment for less developed countries.

• Accelerating reform of the power sector. Introduction of significant private generation will lead to unbundling of the sector upstream.

• Stimulating privatization of distribution downstream and speeding up passage of the Electricity Law for regulation of the sector.

## Project Milestones 2001

**ASIA:** Three IPP projects achieved financial close, namely the 450 MW Meghnaghat BOT in Bangladesh and the 163 MW Kelanitissa BOT in Sri Lanka, both sponsored by AES, and the 1,200 MW Ilijan BOT in the Philippines sponsored by KEPCO. K&M served as principal advisor for these projects. Others in which K&M played a significant role have reached milestones. The 700 MW Phu My 2-2 BOT in Vietnam sponsored by EdF received an investment license, the RFP was issued for POWERGRID's 660 km private transmission line in India, the feasibility study for the 100 MW Ft. William BOO in Mauritius was completed, and the PLN state-utility in Indonesia successfully renegotiated a number of its PPAs.

**MIDDLE EAST:** Two of K&M's IPP consulting services assignments advanced. The 473 MW Carthage BOT in Tunisia sponsored by PSEG Global is targeted to achieve commercial operation 1Q2002 and the 242 MW Jubail Energy BOT in Saudi Arabia sponsored by Saudi Petrochemical was awarded to CMS Energy. K&M-Egypt made significant progress in its multi-year assignment assisting Egypt Telecom to expand services throughout the city by designing and installing 600,000 new subscriber lines along with associated outside plant and switching facilities. K&M-Egypt is also assisting the Alexandria wastewater utility to expand treatment, pumping and support facilities that will improve water treatment capacity in that city.

**EUROPE:** K&M provided independent technical, commercial and financial opinions of pro-

*(continued page 7 side bar)*

## K&M Gets a New Home



*The K&M Group of Companies  
is pleased to announce the  
relocation of its corporate headquarters to  
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Toll Free 1- (877) 728-0390  
[www.kmec.com](http://www.kmec.com)*

## Update Your Contact List With Our New Location

In March, K&M's international headquarters will move from its present location in downtown Washington, D.C. to new, modern office space across the Potomac River in Arlington, Virginia. We look forward to welcoming our clients, partners and friends to help inaugurate our new headquarters and celebrate our 15th Anniversary.

The new office will bring all headquarters operations under one roof. It will feature state-of-the art communications and networking capabilities, a new telephone system with direct dial telephone extensions, four times the bandwidth for internet and data transfer, expanded meeting space, and a bright, tastefully appointed environment.

The new office is conveniently located less than one block from the Rosslyn Metro on the Orange or Blue lines.

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**K&M  
Panamerican  
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L.L.C.**

**TermoConstruct,  
L.L.C.**

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## Meet Our Manager

Mr. Khalil serves as a Project Manager with 20 years experience in international power project management. Since joining K&M in 1990, he has been responsible for a full range of technical, engineering and construction management services for 5,600 MW of power projects implemented in the United States, Latin America, Asia, the Middle East and Russia.

In addition, he manages K&M's technical reviews and independent assessments of clean coal technologies and advanced power systems on behalf of the U.S. Department of Energy's National Energy Technology Laboratory. He also supports K&M's technical due diligence assignments in the areas of commercial, technical, design and operations and maintenance.

Recently he completed a number of commercial and technical reviews of hydro power and wastewater treatment facilities' appraisal reports, service contracts, operation agreements and power purchase agreements related to lease transactions for various investors.

Having completed over 10,000 MW of thermal and nuclear power projects during his career, Mr. Khalil is an expert in project management, engineering, conceptual and detailed mechanical systems design, feasibility studies and quality control programs. He has responsibility for bid document preparation, contract negotiation, tender evaluation and award recommendation, project agreements review and compliance to security package agreements.

Currently, he is managing K&M's Owner's Representative assignment on behalf of Teco Power Services (TPS) of Florida for two 600 MW (each) gas-fired combined cycle power plants (Dell and McAdams) under construction in Arkansas and Mississippi. Mr. Khalil provides home office project management support to K&M's on-site project teams. This assignment includes EPC contractor oversight services such as schedule progress monitoring, construction quality monitoring, EPC contractor change request reviews and contract change recommendation submittals to K&M/TPS management.

In addition, Mr. Khalil is responsible for K&M's newest assignment in Jordan assisting the Ministry to structure and tender the country's second IPP/BOO, envisioned as a gas-fired combined-cycle facility.

He supervised K&M's largest EPC turnkey contract to date for the 314 MW TermoCandelaria gas-fired merchant plant that went into commercial operation in June 2000 in Cartagena, Colombia. The project involved the design, procurement, construction, performance testing and commissioning of the simple cycle greenfield plant utilizing two Siemens Westinghouse 501F advanced technology combustion turbines.



### Riad Khalil Project Manager

*"Mr. Khalil brings that important combination of experience and knowledge which sets K&M apart as a unique company: An excellent engineering capability, combined with in-depth understanding of the financial, commercial and cultural needs necessary to successfully complete projects in today's international market."*  
William Drotleff,  
Senior Vice President

#### EXPERTISE

- Project Management
- Private Power Project Agreements
- Contract Negotiation, Review and Compliance
- Owner's Engineer and Bank's Engineer Technical Due Diligence
- Power Generation Engineering
- Mechanical Systems, Drawings and Specifications Review and /or Design
- Bid/Contract Package Preparation, Evaluation and Purchase Recommendation

This facility also includes a four-bay 220 kV switchyard, 8 kms of 220 kV transmission and water/wastewater treatment systems.

Mr. Khalil has served as project manager and project engineer for several pioneering independent power projects (IPPs) that K&M undertook in the 1990s, namely the 90 MW Al Manah Project in Oman, the 100 MW Mamonal Project in Colombia, the 240 MW Termovalle Project in Colombia, the 1,292 MW Hub Project in Pakistan, the 32.5 MW Hunts Bay Project in Jamaica, the 60 MW Rockfort Project in Jamaica and the 160 MW Magnitogorsk Project in Russia. These represented the first IPPs (BOO and BOT basis) in their respective countries and involved a myriad of new policies and procedures as host governments and state-owned utilities underwent institutional reforms that provided the framework for private sector participation.

For K&M's consulting assignment on behalf of the Government of the Dominican Republic, Mr. Khalil assisted in drafting private power policies and principles. He developed principles related to feasibility studies and security package agreements required for a privately owned facility.

In Egypt, Mr. Khalil served as Project Engineer for several USAID-funded power projects completed on behalf of the Egyptian Electricity Authority. For the 1,200 MW gas and oil-fired El Kureimat Project constructed near Cairo, Mr. Khalil was responsible for mechanical systems design, system descriptions, equipment specifications, preparation of bid/contract packages, bid evaluations and purchase recommendations for mechanical subcontracts. Earlier he prepared a feasibility study for upgrading existing gas turbines for the 300 MW Noubaria combined cycle plant and the rehabilitation and addition of natural gas firing capability to existing boilers at the 348 MW Cairo West Project.

Prior to joining K&M, Mr. Khalil served as Project Engineer for Becon Services Corporation and Mechanical/Process Engineer for Bechtel Power Corporation.

At Bechtel he prepared mechanical systems and equipment specifications for the 1,100 MW Damietta gas- and oil-fired combined cycle project and the 1,260 MW Shoubrah El Kheima gas- and oil-fired project, both in Egypt. Domestically, he served in a similar role for the 1,150 MW Wolf Creek nuclear project and as a Field Engineer on the Unit 2 recovery team for the Three Mile Island nuclear project.

Mr. Khalil is a registered Professional Engineer in Virginia, Maryland and the District of Columbia. He holds a B.S. in Mechanical Engineering from the Polytechnic Institute of New York and a B.S. in Applied Science from St. John's University.

## Project Milestones 2001

(continued from page 6)

posed asset purchases and cross-border lease transactions for a series of wastewater treatment, hydro power, waste-to-energy and transmission and distribution projects in Austria and Germany.

**ENGINEERING AND CONSTRUCTION:** K&M dispatched site teams to the 600 MW (each) Dell and McAdams power projects in Arkansas and Mississippi. K&M is serving as Owner's Representative to project sponsor Teco Power Services. In the Philippines, the 1,200 MW Ilijan project, also an Owner's Representative assignment, is nearing completion.

**TECHNICAL REVIEWS:** K&M completed a due diligence evaluation in support of a proposed sale and lease back transaction for the 475 MW Hugo coal-fired plant in Oklahoma and an independent technical review of the engineering rework for the 100 MW Pinon Pines IGCC facility in Nevada. K&M completed a number of independent technical and financial reviews, for the US Department of Energy, National Energy Technology Laboratory, K&M examined the technical and commercial feasibility of achieving ultra-low NO<sub>x</sub> emissions on advanced turbine systems by reducing from 9 PPM to 2.5 PPM (see related story page 5). K&M also examined the feasibility of accelerated approval of new materials for supercritical and ultra-critical steam power plants. For a commercial client, K&M completed technical studies regarding the use of low BTU fuel gas in gas combustion turbine combined cycle plants and assessed problems experienced during startup of recent technology combustion turbines (F class and newer).

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