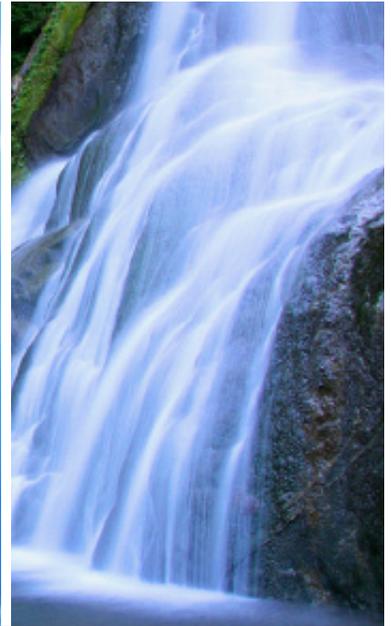
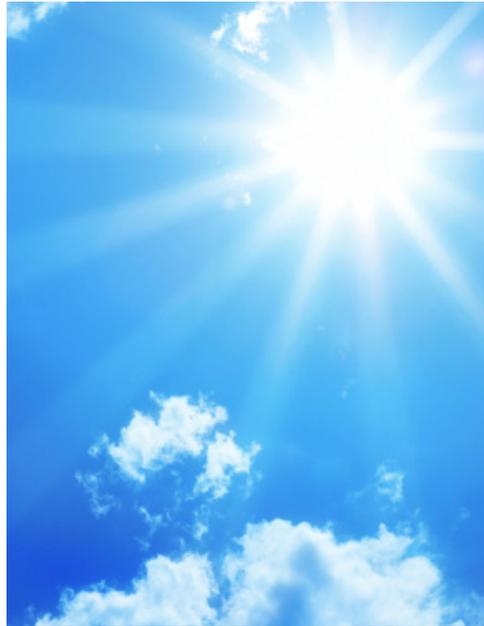


Statement of Qualifications



Prepared by
T. Craig Eschrich, President & CEO
IPV Energy Corporation
10533 Shadowland Ave., Las Vegas, NV 89144
Direct Tel: 419-577-0219
Fax: 720-750-2326
Email: ipvenergy@yahoo.com
Web: www.internationalpv.com



Thomas J. Spearing III, President
Project Management Group Americas
Michael B. Smith, Senior Vice President
Hill International, Inc.



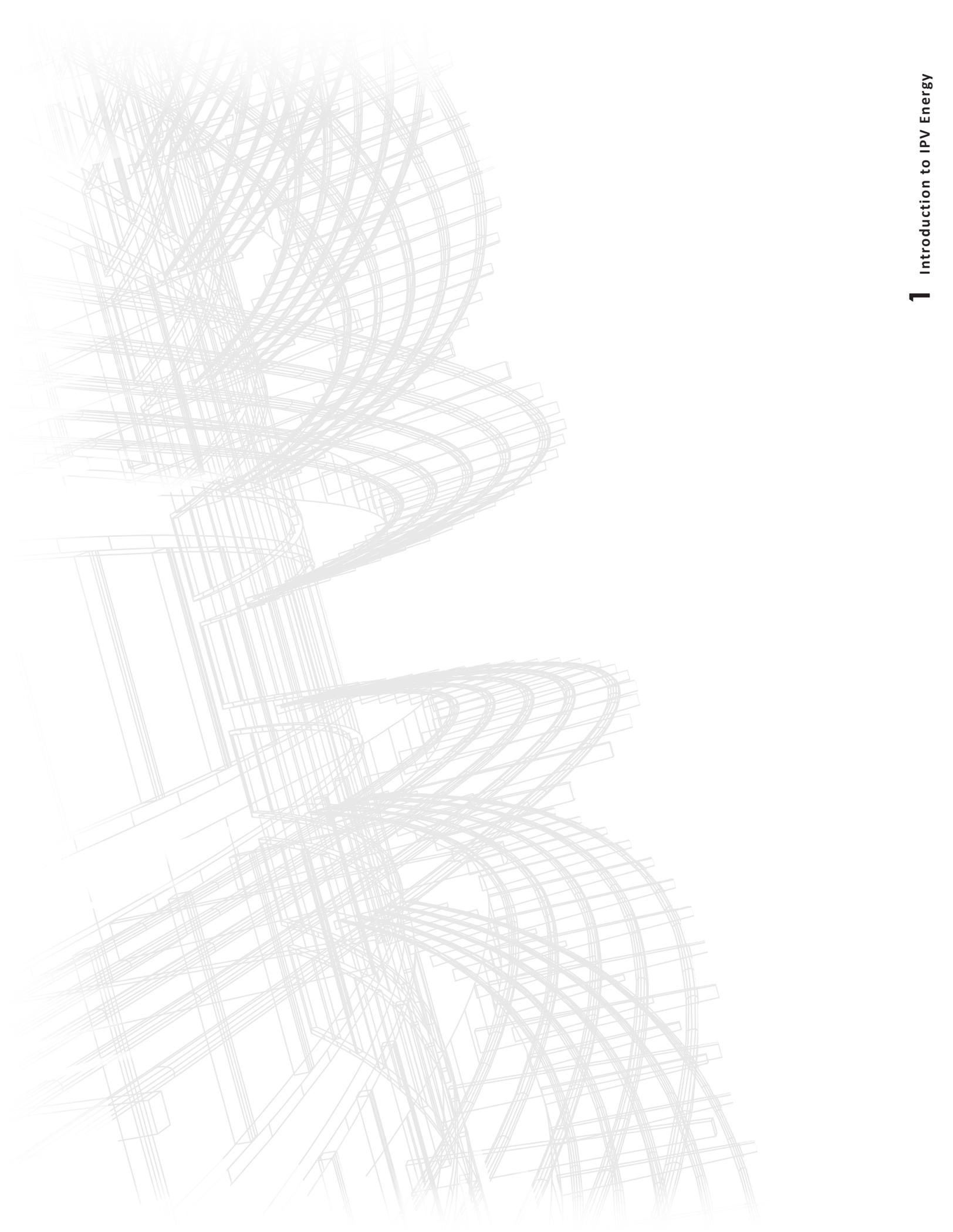
Hill International

Statement of Qualifications

TABLE OF CONTENTS

	SECTION
Introduction to IPV Energy	1
IPV Profiles	2
Projects & Capabilities	3
Introduction to Hill International, Inc.	4
Hill Profiles	5
Retail Experience	6
Power Experience	7
Renewable Experience	8
Qualifications Summary	9

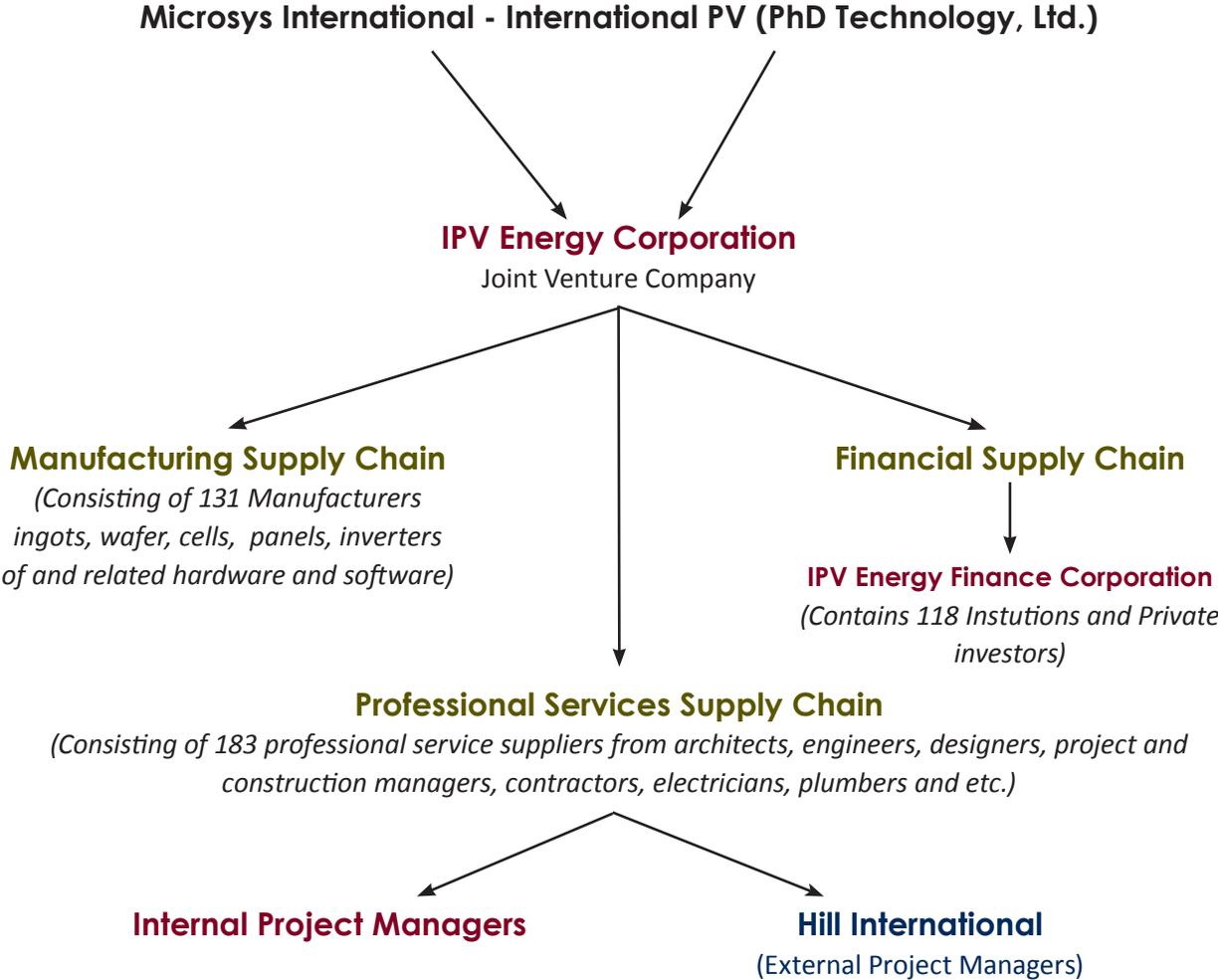




Introduction to IPV Energy

The structuring of the company is paramount. To understand the company and the business model itself, you need to understand not only how we are structured, but also how the business model progresses. We are a totally vertically integrated company that doesn't itself manufacture, construct or directly finance anything. We are a company that orders the supply chain from raw materials all the way to the financing of the final project. Every facet of the operational supply chain is managed by IPV Energy under an elegantly simple and yet sophisticated business model that was designed by T. Craig Eschrich. It took several years to develop the model and several more to actually implement all its contractual components.

The supply chain looks like this:



IPV Energy is the center piece of our organizational structure, the “front man” if you will, for the entire undertaking. The entities in Red are either part of or captive to IPV Energy. The University Research, Development & Assessment Board (URDA) functions as our outside R&D group that reviews everything from the theoretical to the application specific. They are a group of scholars and researchers that can cover everything from the areas of engineering, chemistry and physics to mathematical modeling, business and marketing. These professionals are drawn from some of the most pre-eminent universities around the



world and IPV Energy invites their participation. We also leave room for members on the Board to suggest colleagues they would like to see participate on the Board.

URDA Explained

The key benefit to IPV is that we get access to not only objective insight on technology and business matters, but we also get access to the brightest and best graduate and undergraduate students. The universities also have one of the best public relations departments and technology transfer capabilities, which we access indirectly through their participation. This is important to IPV because we, as a company, try very hard to maintain a very low profile domestically and internationally while at the same time we need to be known; and who we associate with helps to identify and define us while we get to maintain our low profile in the press.

Permit me to digress for a moment to explain why it is that we want to maintain a low profile. Traditional competition requires that all the players in a market have to commit resources to compete and those resources don't come cheap and frequently they are not always effective. There will also be a high degree of statistical uncertainty as to their effective penetration of a market because they are more reactive than pro-active. IPV prides itself in being a pro-active business model. Because we are pro-active, we don't "market" like other companies and we feel we have a "hook" in the form of our model that allows us to select target companies rather than waiting for such companies to develop the political, social and economic will to undertake projects like the one we are proposing. Someone in senior management at IPV goes directly to a member of senior management at the target company and makes a turn-key proposal as we have done here.

If we were to traditionally compete, we would draw a great deal of attention to our "hook" and then there would be a rush to re-order the supply chain as we have done and that would promote chaos in the supply chain, causing prices to go up, not down and "standards" would be slow to emerge, unlike what we have with IPV's business model. So, drawing undue attention to our existence is not in IPV's best interests or in the interest of the client companies we service.

Additionally, our business model is based on a "legacy based management© style" which does not base its measurement of success solely on profitability, but instead balances profitability across a broader macroeconomic spectrum. This broader spectrum allows us to influence the creation of jobs at a state and federal level, material costs on an international cost averaging standard, balance of trade issues and stabilizes markets based on our long term futures purchasing capabilities (*as much as 5-years versus the current standard for raw materials only, which is at 2-years*). Our model and low key presence in the marketplace allows us to advance renewable energy at a pace that exceeds anything contemplated under current business modeling paradigms.

Since many end users are testing various technologies to enhance their renewable energy agenda, our URDA associations could contribute to that effort and create options otherwise undiscoverable in the normal sequence of things simply because we have created a cascading development model through the use of outside resources that makes research and development exponential rather than sequential.



Supply Chain Explained

The components of the supply chain are in **Green** and are self-explanatory insofar as the categories are concerned. Manufacturing and Professional Services are outside players that we enter into agreements with on a long-term basis. Because the scope of our projects are so large, we get and hold their attention and are able to promote their economic stability long-term in exchange for access to an established percentage of their goods and services annually. In the case of the financial supply chain, we are using the services of IPV Energy Finance as a captive, but independent company, affiliated with IPV Energy to arrange for the presentation of our proposals to “Wall Street”.

The financial supply chain requires layers of support in the form of construction financing, take-out financing (debt, equity or a combination of both). We also require financial backing for smaller pilot type projects or projects that are just by their nature smaller (less than \$25M/\$50M). Additionally, we need financial players that can raise a syndicate for the larger multi-billion dollar deals. Consistent modeling is a critical part of what we offer “Wall Street” and it is that predictability or ability to foresee what we will be bringing to them on a regular basis that makes this work for everyone involved.

Client companies and governmental entities always have the option of owning their capital infrastructure as opposed to a third party. The call is always with the client.

In the case of manufacturing and professional services, we have an internal system of streaming inventory and pricing that is interactive with the supply chain. We can post needs and they can announce product or service availability and pricing. This system is driven by a software component that is designed into our website and maintained at the backend where only the IPV Energy staff can see the totality of supply chain offerings.

As part of our legacy based management© style, we have to maintain a flow of materials and services to meet the expectations and needs of the supply chain, not just our own. This can mean that we take projects of a lesser nature on a loss leader basis so that the supply chain is able to maintain staffing and continuity of their manufacturing output. This also helps promote significant loyalty to IPV Energy.

It is also entirely feasible that even in the largest companies and governmental entities that there will be locations where a particular project may not be as economically inviting and in the case of IPV Energy, we propose taking the good with the bad and averaging our economic performance out over the broader spectrum of projects. If any company or governmental entity is to achieve a goal of 100% renewable energy, it will be imperative to work with a company that has no restrictions domestically or internationally when it comes to its supply chain's reach.

A key component of the supply chain is its diversity as well as its agility. Variations of products and scope of service are compelling and this is what defines the ability of IPV Energy to reach projects big and small. Agility comes in the form of rapid response to demands placed on it; and with the supply chain positioned throughout the world, our model lets us operate within all the international trading blocks to achieve both access and price competitiveness with no compromises.



Financial Supply Chain Explained

The financial supply chain link is the most complex component of the business model, but being made up of sophisticates, it allows them to self-regulate with little or no interaction with IPV Energy Finance. We addressed their concerns upfront with regard to Internal Rates of Return (IRR) and Return on Investment (ROI) that met their criteria for funding projects submitted to them; and further provided assurances that their participation would never be solicited if the model was not stable as well as recurring. More often than not we use Net Present Value (NPV) as our basis for promoting project investment simply because it can tend to be as more accurate number for financial personnel to work with.

Essentially, we created a model using major corporations that were deemed stable by the rating agencies and that had been operating in the market for many years; and where applicable, publicly traded so their financial well-being/risk factors were known quantities within the market and were fully transparent to the market at all times. Lesser companies have been done consistent with the model, but that goes to the lesser lenders/investors within our portfolio and while their deal structures are more lenient, they still receive a foreseeable IRR/ROI that is consistently better than they would receive in open market solicitations.

The cast of players in the portfolio is relatively stable and if there are departures or “hold-in-place” participants it is because they have designated a percentage of their fund for renewable; and when they hit that threshold they either withdraw from further participation or they hold-in-place until their position changes. The model allows for the larger players to act as syndicators and so when and if they have a large investment that exceeds their individual appetite or if their holdings begin to exceed their capacity to hold on their own, they are able to bundle and syndicate their holdings so they can return to the active investment fold.

Large companies and governmental entities, may well have preferences for who would hold the paper (equity or debt) on their project and we have no problem utilizing a selected investment banking resource close to the client if that preference is made known. As noted earlier, clients have the option to own the renewable facilities or leave the ownership to third parties from whom they would agree to buy their electricity under a Power Purchase Agreement (PPA) or comparable leasing arrangement depending on the legal environment in the jurisdiction in question.

Financial Supply Chain participants are routinely fed project profile data from the time we internally contemplate a project. As the prospects for that project develop on a step-by-step basis with a client, we continue to update that profile data through our website. Current capacity of the software used to develop the website modules has been exceeded and we currently have portions of the site down for redesign; in that case we have gone to an automated e-mailing system which directs the data to the appropriate decision makers within our database.

You will note from the diagram of the operational structure appearing above that we use a captive company IPV Energy Finance to process all data and deal making exchanges once there is a project ready for funding. IPV Energy Finance may propose deal specifics, recommend currency hedges in the case of



international deals or act as a conduit for project reporting that takes place through Hill International's construction oversight of the project during build-out. Talent within IPV Energy Finance consists of experts in the field of finance that can both buffer and expedite application specific data flow during construction.

IPV Energy Finance also acts as a bridge between the construction financial participants and the permanent financial institution(s), debt or equity. In the instances where a company or governmental entity elected to carry the paper on a project or exercise ownership options at some point in the process, IPV Energy would work to bridge such participation by working with lawyers and tax personnel for all interested parties to insure a best practices transition for all concerned.

Internal Project Management Explained

This consists of in-house personnel or professional suppliers that work to facilitate the contractual arrangement between IPV Energy and Hill International. IPV Energy acts as the conduit for payment of Hill and as a result there needs to be a level of staff review by qualified personnel that triggers actual payment and that likewise insures proper reporting to lenders and to the client as a project proceeds.

In some instances where a project undertaking is so small or the locations sufficiently remote, IPV Energy will rely on its Internal Project Management personnel. But with any project involving a company or governmental entity of any significant size and involving the scope of what is typically contemplated for such larger entities, Hill International would be the primary resource interfacing with our Internal Project Management personnel as noted above.

Hill International (External Project Managers) Explained

Hill's role is to function primarily for the benefit of investors/lenders and the client. Since IPV Energy is paying the bills, Hill will also report to us, but their primary duty is under a third party beneficiary contract to investors/lenders and the client. The technical characterization of Hill's role can range from project management to construction management. Particularly with projects the size of what is proposed for larger clients, their role can have them both working with our supply chain and supplementing it where needed. This is particularly true with needed participation in the Professional Services Supply Chain.

Hill International has both resources and experience that makes management of a project for larger companies and governmental entities essential to the success of that project. If you look at the Qualifications Presentation for Hill, you will see that they have vast experience in managing all forms of energy projects from nuclear to renewable and general facilities construction to the most innovative and eclectic. As a publicly traded company on the New York Stock Exchange, Hill is totally transparent and their history well documented.



IPV Energy Business Model and Macroeconomic Impact

A combination of the scope of what we are proposing and the synergy within the supply chain, dictates that a traditional business model would not work. Typically you caution a venture like IPV Energy to remain focused and engaged in what might be viewed as their core competency. But IPV isn't product or application specific in terms of its competency; it is the concept of ordering the supply chain that is the core competency. Accordingly, what we have had to recognize was that there was a "choke point" point past which we could not advance indefinitely if we did not take charge of growing the supply chain on the manufacturing side of the equation.

Traditional manufacturing resources growing organically without outside participation could not address the demand our business model imposes. If you link together several projects with a major client you are talking about many billions of dollars in capital materials. Current factory outputs, even if you continued to order the supply chain by adding new manufacturing resources already operating in the market to that supply chain would be unable to meet demand. Growth rates of demand have been for the past several years 30-40% above existing capacity to meet that demand and anticipated growth rates within the solar industry are not expected to catch-up sufficiently to meet demand and control market pricing.

In our pro-active business model we have recognized demand is a critical factor and having ordered the manufacturing supply chain as we have, we noted that these companies had the technical capacity to expand, but lacked the access to financial resources to facilitate growth. With the financial supply chain we had the resources and we had the motivating force to facilitate growth in the form of our proactive business model. If a manufacturer could have his capacity spoken for as far into the future as 5 years and the companies that consumed that capacity were larger corporations and governmental entities, there would be no problem funding larger factories.

That said, there was still a component missing in the equation. Large companies and governmental entities at the federal level are typically international in their operational scope and to get a balance between quality and pricing of the end product, you need to have a broad macroeconomic appeal that would result in not only end users and the manufacturers benefiting, but you also need to have governments benefit from improved balance of trade, increased domestic employment proximate to the market being serviced and tax revenues. Bringing on the macroeconomic piece of the puzzle also gave us access to the various trading blocs like NAFTA, ASEAN, OAS and the EU. This served to reduce tariffs on otherwise imported goods and control the price to large companies and governmental entities or the investor/lenders that ultimately own or benefit from these projects being built.

Further enhancing economic factors in the overall pricing/profit model are a number of benefits that can stem from incentives provided by government (State and Federal) in the form of job training credits, investment tax credits, tax abatements for new facilities and the list goes on; and while it may vary between locales domestically and internationally, there are enormous incentives for this type of a model to succeed everywhere in the world and it is a routine part of what we propose.



Concurrent with talking to corporate executives, we are speaking with manufacturers that want to expand, governments that want durable well paying manufacturing jobs in their jurisdiction, and federal and State authorities that have been concerned about the exporting of jobs and resulting unemployment as well as balance of trade issues. Our business model never operates in a vacuum and delivers added value to clients not only because of lower energy costs, but also because of the bragging rights to going green and the creating of new jobs in the process.

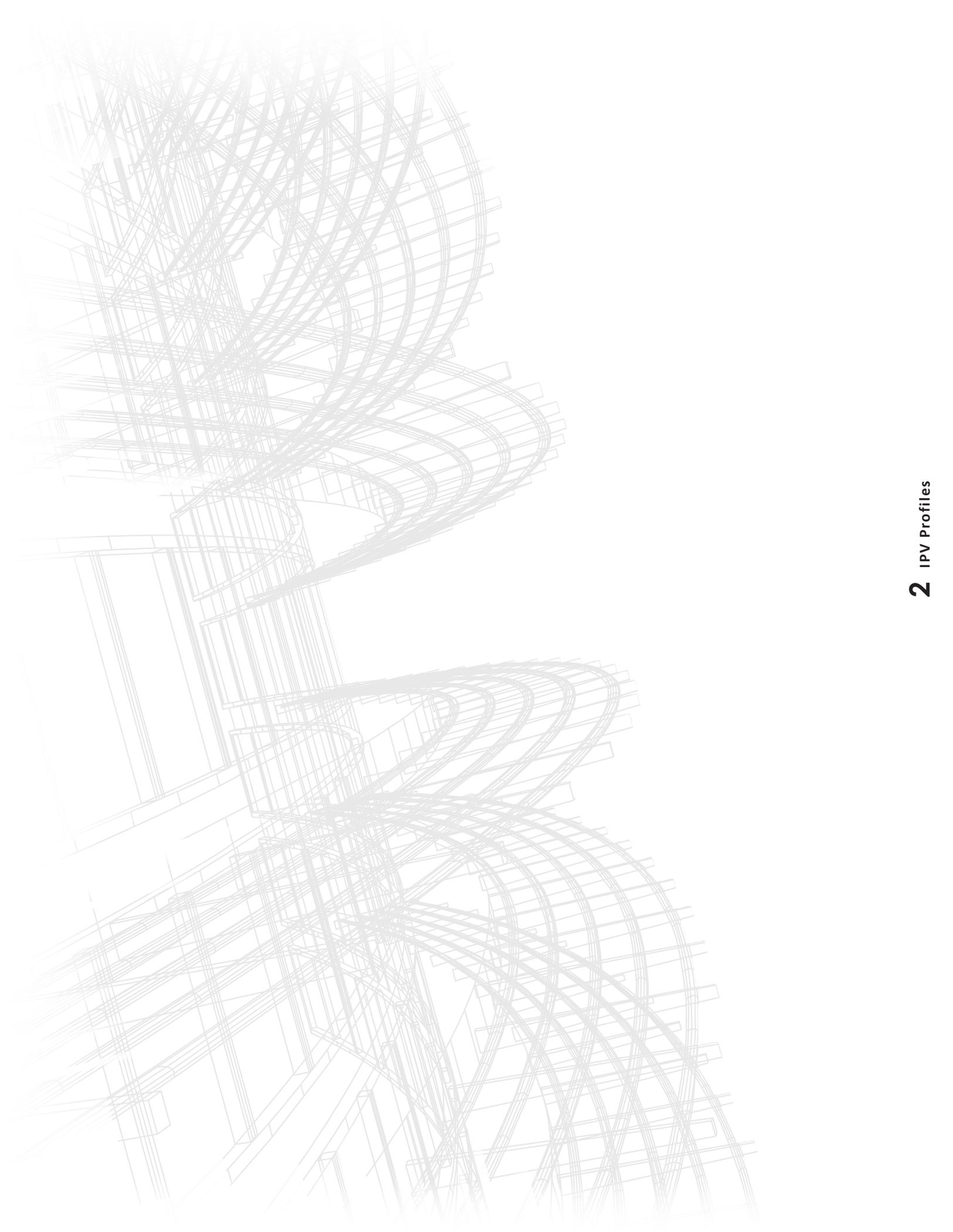
The beauty of this pro-active business model is that IPV Energy will be growing from its virtual roots into an economic powerhouse that will be able to continue driving pricing in the marketplace that will be in-line with our legacy based management[®] style. The synergy is unmistakable between the various facets of the operational structure; and when you consider the benefits that it represents for individuals, industry and government, it is not hard to recognize how this type of a business model when fully in play will be self-replicating.

Current Programs

Based on the foregoing concepts, IPV Energy has implemented a plan for the development of a 1-2Gw manufacturing facility in North Las Vegas, Nevada. The current plan calls for 4 companies from our supply chain with ISO plant certifications overseas to jointly develop a manufacturing facility for mono and polycrystalline solar cells and an adjacent assembly facility for panels. This facility will be largely powered by a single axis tracking solar array located on the 2,000 acre + site.

Capacity from this joint facility is by agreement already committed to IPV Energy projects. The facility is expected to employ more than 10,000 people and has commitments being lined up with state and federal government entities that will provide 30-40% of the total cost in both direct and indirect financial commitments and tax benefits. Financial supply chain participants are prepared to back the balance of the financial requirements.





Ordered Supply Chain Management

Raw Materials Manufacturing Assembly Professional Services

Architects

Structural Engineers

Design Engineers

Civil Engineers

Mechanical Engineers

Construction

In-House Construction Management

In-House Project Management

Financial

Institutional Investment

Deal Structuring

Currency Hedge Structuring

Custom Financial Modeling

IPV Energy Corporation (IPV) is the world's largest totally vertically integrated supply chain for the development of photovoltaic systems. No one can match the scope and quality of performance that IPV represents in the market today. Designed to execute large scale commercial projects, industrial and utility grade solar as well as governmental and residential applications, IPV as a presence in the market has principals in its supply chain that have decades of experience in photovoltaics and renewable energy generally. IPV also has the ability to execute each and every project at no capital cost to target clients.

The ability of Hill International as part of our strategic business alliance makes the projects we develop move seamlessly, without delay and in accordance with globally recognized best practices. IPV was established by way of an international Joint Venture formed by USA based **International PV** and Singapore based **International Microsys. PhD Technology**, a London based photovoltaic company joins the strategic business alliance to assist in expanding the reach of the company on a truly global basis.

IPV Energy Finance, Inc. rounds out the capacity of the international business alliance as a captive international investment banking consultancy that structures and places the projects developed by the alliance. Because the company's ventures are all part of a well defined totally vertically integrated undertaking, quality, cost and performance are not mutually exclusive concepts.

IPV Energy and **IPV Energy Finance** are both based in Las Vegas, Nevada and also have offices in the United Kingdom, Singapore, India, China, Mexico and Canada.



Corporate Management

T. Craig Eschrich

Co-Chairman and Chief Executive Officer of IPV Energy Corporation also serves as the Chairman and Chief Executive Officer of IPV Energy Finance and is a founding member of both firms.



Mr. Eschrich graduated from the State University of New York at Buffalo in 1971 with a degree in Political Science and Business Administration. His college education was made possible from his distinguished service in the United States Marine Corps which included extended combat tours in Viet Nam. Mr. Eschrich was trained in special operations with the 2nd Force Reconnaissance Company and was appointed to college by the then Governor of the State of New York, Nelson Rockefeller.

Mr. Eschrich went on to attend law school, graduating from the Ohio Northern University School of Law in 1973 after only 2-years working on an accelerated schedule. He returned to the United States Marine Corps until the end of the Viet Nam War when he returned to practice law and pursue his career as an entrepreneur. He has practiced law for more than 36-years focusing on international trade, tax, business law and corporate finance. He has been a frequent contributor to numerous Chinese Business Journals where he has authored a variety of articles on foreign trade and economics.

He has been a successful businessman owning and managing one of the world's largest commercial satellite technology ventures with the Russian Space Agency. His other holdings have included natural gas ventures, restaurants, transportation and construction companies. He also ran a successful international investment banking consulting practice and served under four United States Presidents as a member of the intelligence community and went on to serve as a special advisor to the White House on nuclear, chemical and biological non-proliferation during the Clinton administration.

Mr. Eschrich authored the current Pro-Active Business Model that is the foundation for the current business undertakings. He is a co-founder of IPV Energy Corporation with Gautham Viswanadam and the founder of IPV-Energy Finance, Inc. He is also a principal and manages International PV, Inc. here in the United States and is a founding Director of PhD Technology, Ltd. based in London, England. Mr. Eschrich is multi-lingual and has spent a significant part of his professional career living and working overseas.



Gautham Viswanadam

Co-Chairman/Chief Technology Officer of IPV Energy Corporation and also serves as a member of the Board of Directors and Chief Technology Officer of IPV Energy Finance, Inc. and is a founding member of both firms.



Gautham Viswanadam obtained his B.Tech (1980) and M. Tech (1982) degrees in the field of Metallurgy and Materials Technology from Indian Institute of Technology (IIT), Madras. He worked with the Indian Telephone Industries (ITI) in Bangalore from 1983 to 1995.

Mr. Gautham was one of the major participants in setting up a VLSI packaging and assembly line at ITI. This set-up was used to support National defense and space communication device packaging from 1988 to 1995. Furthermore, Mr. Gautham was also responsible in obtaining Central government grants to set-up a world class VLSI package development & production centre at ITI in 1989. This facility was recognized in 1991, by Hitachi Semiconductors Japan for device subcontract activities.

In 1995, Mr. Gautham accepted an opportunity at General Motors (GM), Singapore with the objective of experiencing an International manufacturing atmosphere. He promptly took up a challenging role in GM's automotive electronics division in Singapore. During his tenure at General Motors Mr. Gautham made some very significant contributions to the company's process development line. Some of them include, (i) Improving the Fuel Vapour pressure sensor yields from 55% to 95% at the production line. (ii) Solved various silicon device manufacturing issues which ultimately resulted in a more efficient production line and reduced production costs (iii) Package Development of a Side Impact Sensor that is currently used in a number of automobiles today.

In 1998, Mr. Gautham joined the Singapore Institute of Microelectronics (IME) to execute a Spin-Off company focusing on the MCM-D (Silicon Multi Chip Module) Technology, which was licensed from Lucent Technologies (AT&T), USA. Through this spin-off, Mr. Gautham had become one of the Founding members of a new Singapore company M/S Syspac Technologies Pte Ltd. Various technologies such as Flip Chip Technology, RF ID Antenna development for 13.56 MHz transponder, Wafer Level Packaging technologies were also developed and patented at Syspac Technologies immediately following its formation.

In 2001, Gautham founded a private company in the name of Absara Microsystems. The objective was to build Intellectual Property in various semiconductor process & packaging technologies. Few patents were filed at Singapore and PCT levels and the same were granted later. A foundry was



concurrently initiated in partnership with a Singapore Investor, which was to support the packaging needs of the Semiconductor wafer fabrication units in and around Singapore.

In 2004, Gautham headed the advanced Packaging division of Motorola at Kuala Lumpur, Malaysia. He had a responsibility to implement Flip Chip Technology transfer from Motorola USA to Motorola's Malaysia plant. He was also deputed to Motorola's various automotive device customer sites to study their manufacturing processes and improve their product reliability and life. Three patents were filed by Mr. Gautham while at Motorola; some of which are currently being pursued in production level at Motorola.

Mr. Gautham's contribution to Motorola was significant with many patents to his credit along with numerous other developments and process improvements some of which realized very high profits for Motorola.

In 2005, Mr. Gautham took up a CTO (Chief Technology Officer) position in a new startup company from Germany (M/S Schott Advanced Packaging, Singapore). Here, he was involved in bringing a University developed product to the production line. A bulk production facility was set-up in Singapore to produce Wafer Level Packaging of Image Sensor devices. Some of these products are currently being used in Mobile phones, IPods, Laptops, CADcams, digital cameras and other miniature devices.

Gautham has gained vast experience in technology development, marketing and management through his years of service to some of the world's largest corporate giants as well as leaning the art of 'the start-up' as he worked in a more entrepreneurial environment. Some of his accomplishments are noted below.

1. Fine Pitch Flip Chip Technology (Patent granted on fine pitch high lead solder bumping using solder printing process)
2. Lead Free Solder for automotive device applications (Electroless Ni/Au with Sn/Ag/Cu solders)
3. Mask less Lithography (Patent granted on mask less re-distribution process)
4. Level Packaging for Image Sensor devices (Patent granted)
5. Invited speech delivered at Shanghai International Microelectronics Conference on "Challenges in Wafer Level Packaging for semiconductor devices."
6. Invited speech delivered at Singapore International Microelectronics Conference on "Wafer Level Packaging process for Mobile device applications."
7. Patent awarded for Three Dimensional device Packaging.
8. Patent awarded for a Very cost effective packaging method for RF device applications.
9. Patent pending for a multi chip module using build up process at substrate level platform.



10. Patent filed for “Wafer Level Integration Module” which completely eliminates device packaging and assembly processes.
11. Patent applications pending on Wafer Level Lens module device for Semiconductor Image sensor devices.

Gautham Viswanadam’s most recent undertaking with the Joint Venture, IPV Energy Corporation, capitalizes on all the manufacturing and management experience as well as his technical expertise as an engineer to insure the professional performance of participating companies is at a standard of excellence that will sustain the venture for the benefit of clients and investors.



Candace K. Kroll

Director/Interim Chief Financial Officer, IPV Energy Corporation and also serves as a Director, IPV Energy Finance, Inc.



Ms. Kroll is concurrently Director, Claims Group Administration, Hill International, and balances that role with her duties with IPV Energy and IPV Energy Finance bringing with her a very diverse 27 years of business experience spanning commercial and consumer banking to investment banking and construction.

Previously employed by CEMEX/fka/Rinker Materials as an Assistant Credit Manager starting in 2005, Ms Kroll had been with the company since 2000. Projects that she has worked on with CEMEX/Rinker include the \$8B MGM Mirage City Center and the \$2.9B Fontainebleau Las Vegas, both of which were LEED Certified projects.

Additional positions held within CEMEX/Rinker Materials included being the Credit Manager of the Vancouver, Washington/Portland, Oregon Region from 2002 until 2005 when she transferred to the Las Vegas Office. Prior to that, she worked as the Human Resources Assistant from 2000 to 2002.

Before joining Hill, her position at CEMEX Las Vegas afforded Ms. Kroll the opportunity to take on several outside board memberships with domestic and international companies and she also served as an outside consultant. Her belief in photovoltaics and renewable energy drove her passion for the technological breakthroughs these companies represented and she continues in her efforts to this day.

Joining International PV in early 2007 and PhD Technology in early 2008, Ms. Kroll was able to marry her financial and construction background with an emerging solar technology; and assisted these two bold players to develop marketing and financial models that remain unique and highly creative as well as profitable.

Her membership on the Board of Directors of International PV and her Advisory Board membership on PhD Technology have placed her in a variety of roles to include the acting role of Chief Financial Officer as well as being Chairman of the Search Committee to find a permanent replacement CFO; and she is also a member of the University Research, Development and Assessment Board.

Candace has also overseen a number of M&A projects to facilitate the vertical integration of the companies as well as SAP software design, modification and implementation. Ms. Kroll also is running for Secretary of the National



Association of Women In Construction (NAWIC) for the 2010-2011 business year.

Prior to CEMEX/Rinker and the various Boards and committees above noted, Ms. Kroll held positions with Glacier NW/fka/Central Reddi-Mix, Inc. from 1996 to 2000 handling human resources, payroll and accounts receivable responsibilities to include L&I Claims, workers compensation, prevailing wage, safety and DOT regulated activities. Candace also administered the Union Contracts Program for the company amongst other duties that she performed.

For six years commencing in 1990, Ms. Kroll moved into the area of international investment banking consulting for World Funding Group, Inc. and served as a consultant and member of the Financial Advisory Board overseeing accounting systems, international and domestic regulatory report processing pursuant to FASB guidelines. She also assisted in development of module integration of SAP style software that was custom developed over a series of years by several different vendors as well as monitoring U.S. currency controls. She also developed and taught training programs for international staff based in the United States.

In 1989 Ms. Kroll served a 1-year period with Pima Savings and Loan in Arizona State while she contemplated her next strategic move with her career which led to her investment banking move with World Funding.

In 1981, Ms. Kroll Started her career working for Wells Fargo/fka/Capital Savings Bank making her way up from a teller to being a Systems Analyst overseeing the development and implementation of a 45 branch banking operation in the State of Washington. Candace served as Corporate Retirement Accounts Manager and was administrator of individual retirement accounts (IRA & KEOGH) while managing forty-five employees in her department. She also oversaw federal reporting requirements with the Internal Revenue Service and handled notification and reporting with the bank's customers.

Candace Kroll has a proven record of academic excellence and job performance that has spanned 4-continent and moved her in rapid fashion up the corporate ladder to her latest move into Hill International. She balances her career with outside activities in the area of Youth Rehabilitation Programs and Palliative Home Care that involves dogs trained for hospice therapy. Ms. Kroll is known by her colleagues to be a thinker and planner and someone that sees no barriers to what can be achieved if the mind conceives of it.

Ms Kroll recently received her degree (2010) in Accounting, graduating with High Honors.



Project & Construction Management/Consultants

Mike Martindale

Senior Vice President Project & Construction Management for IPV Energy Corporation

Mr. Martindale has over 36 years experience in construction and 29 years of Construction Management and Project Programming. Programming and Project Management for Bio Science, Pharmaceutical, Pre Clinical Studies (Lab) Microelectronics, Petro Chemical, Fossil and Nuclear Power Generation. Mr. Martindale has been involved in a number of Greenfield and Retrofit projects from Design Development through Commissioning, Scheduling and Procurement. Specific areas of expertise in Project Management, Site Logistics, Programming, Mechanical and Process Piping Systems, Process Controls, Building Electrical, Building Automation and Life Safety Systems. Implementation of Green Build technologies and alternative grid tied and off grid power sources.

Representative assignments include:

Charles River Laboratories, Reno, NV

Vice President, HE&M Inc. Owners Representative for \$175M Project in Reno NV. Programming and Senior Project Manager on behalf of the owner. Performed reviews and monitoring of CM performance, Authorization of monthly Contractor Progress payment, Coordination of Vendor and Subcontractor relations, budget and schedule compliance for a 127 Room Vivarium Retrofit Project in Reno Nevada for Pre Clinical Drug Studies

Sanofi Pasteur NIVMF, Swiftwater, PA

Site Manager for New H5N1 Influenza Antiviral Manufacturing Facility. Managed subcontractor installation of HVAC, Electrical and Piping Systems for New Egg culture Flu Antiviral manufacturing Facility

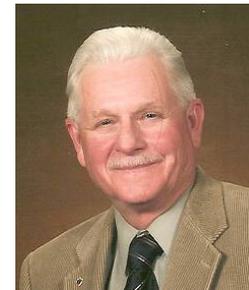
GSK Biologicals, Marietta, PA

Site Manager Project Programming for Multi Phase Site Development. Site Logistics, Procurement Strategy, Safety Program, Contracting Strategy, Construction Scheduling and Budget Preparation for new cell culture Flu Antiviral Manufacturing facility. Small scale, Medium Scale and Large Scale Cell Culture, Fermentation, Fill Finish Facilities and Packaging Facility. H5N1 Antiviral development facility

Berlex Project Atlas , Lynnwood, WA

Senior Process Systems Engineer Preconstruction Services, Design Development

Procurement of Fermentors, HPLC Skids and Columns, MF/UF Skids, Clean



Education:

Center for Paralegal Studies, Atlanta, GA, 1994
Dimetrics Welder Instructor Training, 1981
Arc Machines Welder Instructor Training, 1993
United Association Steamfitters, 1975
Aerospace Machinists Apprenticeship, 1969
Finance Management Ft Steilacoom College, Steilacoom, WA, 1975

Registration:

USGBC

Affiliations:

USGBC
American Society of Mechanical Engineers
International Society of Pharmaceutical Engineers
American Welding Society
United Association of Plumbers and Steamfitters



Utilities Skids, Tanking Modules and distribution piping for \$57M cGMP Bio Science Manufacturing facility. The new Atlas facility will produce Leukine, a cancer drug for the treatment of Leukemia. Leukine is now in the 3rd phase of clinical trials for use as a therapy for Chron's Disease.

Applied Materials, Sunnyvale, CA

Process Mechanical Superintendent. Coordinated Process Piping and Mechanical installation of \$33M Universal Tool Bay Project in Sunnyvale Ca. R&D Labs, Waste system for Acid and Solvent Waste tanking and scrubber systems. Installation of Class 10 and Class 1000 clean room plenum units, Fan Filter units, Makeup Air Handlers and Recirc Air handlers. Bulk Chemical distribution and Process Utilities. August 2003 – December 2003

Turner Construction Company Inc., Baxter Bio Science, Glendale, CA

Plasma Fractionation Facility - Electrical, Process Controls Manager. \$129 M Greenfield Plasma Fractionation Facility. Member, Corporate Design Team. Participated in Design Development in behalf of the Owner, Managed Engineering Coordination 3D Modeling of all utilities. Change Evaluation.

Managed installation of 7500 point Delta V Process controls system. 6000 Amp service entrance and all building electrical systems. 1100 point BMS system and LSS systems.

Pre and Post Viral Labs and Fractionation Suites. Oct. 2000-August 2003 Turner Construction Company

Intel, Hudson, MA

Senior Construction Engineering Manager. Design Coordination and Construction Management of P858 PSSS Process Systems, Chemical, Gases (BSGS/Spec. Gas) UPW, Mechanical and Process Systems. ADPMarshall / Fluor Inc. Feb. 2000 to October 2000

IBM, Essex Junction, VT

DI Water Site Systems Manager. Coordination of Design and construction for IBM Site, Essex Jct. Process Systems. CMOS 8, CMOS 6&7, CUP Building DI Upgrades ADPMarshall / Fluor Inc. April 99- February 2000

IBM, San Jose, CA (Cottle Road Media Storage Facility)

Mechanical/Process Systems Coordinator. Retrofit of the Taurus Vacuum Phase IV project. Demolition of the Vacuum area and upgrade of mechanical and process systems for the expansion of manufacture capability in an existing manufacturing area in building 006. Clean room class 100 build \$11.8M. ADPMarshall / Fluor Inc. Oct. 98 – April 99

Intel, Portland, OR (Ronler Acres RB1.2/D1BR Project)

Process Systems Coordinator (MEP) \$92M. Coordination of RB.1 project process systems for Phase 2 build out of bridge building for 300mm. Wafer support and startup of process systems. Intel Ronler Acres Campus, Hillsboro Or. ADP Marshall /Fluor Inc. December 1997- Oct. 98



Whiteoak Semiconductor, Sandston, VA

Startup Manager. Setup startup program for Whiteoak Semiconductor, \$348 M build of semiconductor facility, Fab Building, Probe and Test Assembly building, Cub building and waste process facility. June 1997-November 1997 DPR Inc.

Thompson Industrial Services Inc., Charleston, SC

Fabrication Division Manager. Division manager over fabrication efforts for structural steel and piping systems. Established QA/QC program, wrote QC manual for the purpose of ASME review and certification for manufacture and repair of Code vessels and piping systems. Fabrication design for Stainless Steel, Carbon steel, Zirconium, Titanium orbital and manual welding programs. Fabricated piping systems for Merck plant in Elkton, VA. For the manufacture of Crixivan. Spraying system manifolds for Nucor Steel. Charleston, S.C. December 1996- June 1997

Hewlett Packard Omega Project - Energy Center Expansion, Building 9, and Building 10, Corvallis, OR

Mechanical/Process Systems Coordinator. An \$88M build of two separate new buildings and an Energy Center expansion. B.10 275,000 sq. ft. Administration bldg with two class 10,000 clean rooms, R&D (Laser) labs, cafeteria etc. B.9 90,000 sq. ft. building to house proto and super proto assembly, class 1000 clean room for plastic pipe fabrication.

Member of Hewlett Packard Corporate Design Team, performed sub-contractor bid analysis, Design review, and submittal review, pre-purchase of major equipment (HVAC and process). Wrote pre-startup and startup check lists for HVAC and Process systems. August 1994 - December 1996, Andersen Construction Co.

Hewlett Packard Building 2 Fast Fab, Ink Jet Business Supplies Unit, Corvallis, OR

Project Coordinator. A \$65M build of a Class 1,000 ballroom computer chip manufacturing clean room designed for the installation of process tools with mini and micro environments, within an existing 350,000 sq. ft. building adjacent to a built out FAB (ICBD). The project includes an energy center, various additions, replacement of a multitude of mechanical and electrical manufacturing process systems and services, coordinated process tool hookup of wave 1 tool set. January 1995 - August 1995, Andersen/McCarthy Construction Co.

Kelly Technology, Portland, OR

Superintendent. Assisted J.H. Kelly to establish their high purity installation group. Set up Clean Room in Shop and assisted in the design and construction of 2 class 100 clean room trailers for on site fabrication of high purity stainless and PVDF piping (Sig-F), training of craft people for jobsite installation and supervision. March 1994- December 1994, Kelly Technology

Hess Oil Virgin Islands Corp, St Croix, USVI

Project Manager. Orbital welding of piping systems on \$1.2B Cat Cracker installation in Hess Oil Refinery. Supervised site facilities upgrade programs on project basis. Nov. 1992- February 1994, PCI Energy Services Inc.



Boeing Wing and Spar Facility, Frederickson, WA

Supervised installation of Energy Center to serve the 777 Campus near Tacoma, Washington. January 1992 - November 1992

J.H. Kelly Inc., Longview, WA

Established program for the fabrication of Titanium piping system utilizing orbital welding equipment for small bore and large bore piping. September 1991 - December 1991. JH Kelly Inc.

Merom Power Generation Facility, Merom, IL

Project Manager. Designed remote video head and fixtures for top hat replacement on high pressure generator shell. August 1991 PCI Energy Services

Plant Hatch, Baxley, GA

Project Manager. Designed fixtures for K-Valve replacement also designed custom video system for internal welding, stellite valve seats and guides. April 1991- August 1991. PCI Energy Services

Saturn Automobile Assembly Plant , Nashville, TN

Supervised installation of Robotic paint system for Saturn car plant. August 1990- April 1991.

IBM, East Fishkill, NY

Instructor. Training of orbital welding and High Purity piping system installation, Bldgs. 300, 330. April 1990- August 1990 CB Strain Inc.

Assisted J.H. Kelly to establish their high purity installation group.

Set up Clean Room in Shop and assisted in the design and construction of 2 class 100 clean room trailers for on site fabrication of high purity stainless and PVDF piping (Sig-F), training of craft people for jobsite installation and supervision. March 1994- December 1994, Kelly Technology

Indian Point Nuclear Facility, Peekskill, NY

Superintendent. \$65M Westinghouse steam generator replacement, Trained welders on video applications involved in piping and generator replacement, later supervised installation. October 1989- April 1990. PCI Energy Services

Zion Nuclear Facility, Zion Benton, IL

Designed remote control video weld head configuration and fixtures for replacement of canopy seals on reactor head. January 1988- April 1988. PCI Energy Services

Mt Storm Power Station, Mt. Storm, WV

Superintendent. Replacement of extraction steam piping. April 1988- July 1988. PCI Energy Services

Chin Shan Unit 2, Taipei, Taiwan

Superintendent. Developed weld head for limited access remote control video overlay on recirculation loops. December 1987- January 1988 Dimetrics Inc.



Connecticut Yankee, East Haddam, CT

Superintendent. Replacement of Extraction Steam piping system. January 1987- October 1987 Dimetrics Inc. (GAPCO)

Millstone Nuclear Facility, Groton, CT

Project Manager. Managed installation of venturion inspection nozzles in Unit 3. November 1987 - December 1987 Dimetrics Inc. (GAPCO)

Cooper Nuclear Facility, Brownsville, NE

Superintendent. Deep bore removal and replacement of Safe end Nozzles (N2) and complete re-circ loop replacement. November 1985 - July 1986

Dimetrics, Inc. (GAPCO) Beaver Valley Nuclear Unit II, Shippingport, PA

Superintendent . Replacement of Emergency stop valves. PCI Energy Services Inc.



Howard H. Depew, PE

Senior Outside Engineering Consultant to IPV Energy Corporation also concurrently serving as Senior Project Manager Charles River Laboratories, Inc.

Mr. Depew is a highly experienced engineer in industrial and heavy commercial facilities planning, design, construction, startup and maintenance with project experience in Europe, Central Europe, Africa, Asia and the Middle East. With over 30 years of diversified experience, Mr. Depew has been responsible for managing all aspects of project development and implementation. This includes business development, definition of requirements, developing preliminary and final project proposals, design over-sight, selection of contractors, contractor schedule and cost tracking, field management of contractors, technical resolution of construction issues, and final start up and commissioning of projects. Howard has also had extensive experience with setting up maintenance sustaining operations and providing long term consultation.

Mr. Depew is a leading specialist in rapid deployment project methods and appropriate metrics for project performance. He has a demonstrated ability to provide senior leadership to multiple culturally diverse project teams with a seasoned ability to manage projects to successful completion under limiting conditions.

Senior Facilities Consultant to Charles River Laboratories, Inc 7/06-current

Provided project management, startup services, and energy management consultation for various internal projects.

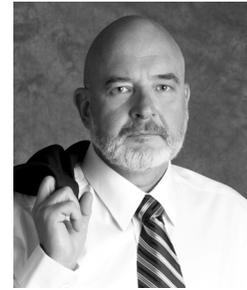
- 300,000 SF new preclinical facility in Reno NV. Facility contains the worlds largest indoor vivarium. A mechanically intensive laboratory environment specifically built for contract toxicology studies.
- 60,000 SF new preclinical facility in Shanghai, China.
- Energy management projects throughout N. America and Canada
- Various worldwide projects to increase operational efficiencies

Senior Project Manager, United Construction Company 9/05-7/06

Provided senior level management to numerous project managers involved with tilt-up warehouse and industrial construction throughout western US.

International Projects Business Development Manager, The Boeing Company, Homeland Security Services 7/04-8/05

Developed upgrade proposals to harden various commercial, industrial, government, and palace complexes against terrorism for various Middle Eastern entities and the TSA.



Education:
BS Mechanical Engineer,
Kansas State University,
Manhattan, KS
Boeing management
training



- Provided on site survey assessments of counter terrorist facilities needs
- Analyzed security threats and developed counter terrorism facility upgrade proposals

Executive Program Manager West Region, The Boeing Company, Homeland Security Services 9/02-6/04

Provided full range of project management to the TSA for a rapid deployment of baggage explosive screening and airport security needs after the terrorist attacks of 9/11.

- Implemented the design and construction of the largest fully automated in-line baggage screening system in the USA at that time and provided program management for the TSA's project to install baggage explosive detection systems in various airports including remodeling efforts at security check points

Director of Facilities, The Boeing Company, International Support 3/98-8/02

Complete responsibility for design, construction, and facilities sustaining operations for Boeing's support facilities in various countries. These facilities typically included office complexes, special use areas, and residential compounds. Build-outs included training rooms, multimedia theaters, executive level offices, areas to entertain various heads of state, and various specialty support facilities for Boeings array of products. Residential compounds were both leased facilities with retrofit and upgrading as well as new construction. Tasks for these initiatives included:

Facilities needs assessments / site selection / leasing negotiations / contractual arrangements / design and construction management / design and construction of security and anti-terrorist countermeasures / utilization of indigenous work force and contractors to design, build, and operate permanent facilities to US standards

- **Rome, Italy 09/01-11/01** - Facilities to support Boeing's array of defense/commercial products in the region
- **Johannesburg, South Africa 08/00-09/01** - Facilities to support corporate globalization initiatives in sub Saharan Africa
- **Accra, Ghana 08/00-09/01 (concurrent with project in South Africa)** - Facilities to support corporate globalization initiatives in sub Saharan Africa
- **Brussels, Belgium 03/00-07/00 (concurrent projects Prague, Rome, Paris, London)** - Facilities to support expanded sales, product support in the region
- **Seoul, South Korea 03/98-10/98** - A rapid build out driven by the bankruptcy of the former lease facilities owner

Director of Facilities, The Boeing Company Boeing-Česka, Aero Vodochody, Odolena Voda, Czech Republic April 1998-March 2000

Initiative to manufacture and market defense / commercial products in Eastern and Central Europe

- Provided facilities and construction management consultation on western methods
- Facilitated modern preventative and predictive maintenance development



- Provided oversight for factory and centralized utility plant modernizations
- Provided project over-site for air field upgrade project
- Developed master facilities plan for 5 year renovation program
- Provided consultation on facilities short and long range plans
- Developed cost proposals for various site utilization scenarios
- site utilization scenarios

Facilities Assessment Manager, The Boeing Company Boeing/MD Special Team Aero Vodochody, Odolena Voda, Czech Republic 06/97

Led facilities due diligence of Aero Vodochody and Letov for purchase by The Boeing Company

Environmental Compliance Manager Facilities, Wichita, Kansas 02/97-03/98

- Retrofit open top degreasers for NESHAP compliance
- Lead team in extensive redesign/rebuild of closed degreasers
- Lead project team to remediate ground water contamination

Site Utilities Manager and Energy Management Facilities, Wichita, Kansas 04/95-01/97

Managed the operations of the sites steam, chilled water, compressed air, cooling towers, and energy management systems. Developed and implemented an exhaustive strike plan. Plan was implemented successfully to operate all site utility plants during a strike. The Wichita site has over 11-million SF under roof, located on approximately 600 acres.

- Managed the training of salaried employees to operate the site's mechanical plants
- Identified and contracted operational and training expertise
- Plants included boilers, compressors, chilled water, cooling towers, industrial waste plant, and water distribution system

Special Projects Senior Manager Facilities, Wichita, Kansas 10/90-03/95

The final phase of a one million square foot automated chemical processing facility (Boeing Wichita's largest facilities project of record). Facility contained automated, chemical milling, anodizing, phosphoric anodizing, and plating tank lines capable of processing Boeing's largest product components. System contained 5 miles of automated conveyor, numerous specialty spray robots, polish robots, and specialty equipment. Tank lines had extensive large scale automation, automated cranes and automated doors with exhaust and scrubber systems. (120 of these tanks were 80 feet long). Managed design, construction and startup

- Setup and operated 130 man, 3 shift maintenance organization, 8 reporting supervisors
- Managed the 24 by 7 operation of process water, aluminum extraction, waste treatment, and chilled water plants in a union environment
- Managed the maintenance, retrofit, and rebuild of all factory automation



- Lead the effort to develop predictive maintenance processes
- Managed the site industrial waste treatment plant
- Managed the set-up of Boeing Wichita's first facilities service center, combining all areas of facilities services into one organization

Special Projects Manager Facilities, Wichita, Kansas 07/87-09/90

Modernization factory rearrangement / air conditioning of a one million SF existing factory

- Cab operated overhead crane replacement and rail system, (15) 300ft /20 ton cranes with 71/2 miles of rails
- 550,000 SF conditioned factory expansion, 60 foot hook height
- Specialty fuel tank seal and cure building
- Renovation of Chanult airfield and infrastructure Lake Charles, LA
- Mechanical project manager, new 22 position, KC135 maintenance facility, Lake Charles, LA

Engineering Manager, Processing Equipment 1987

Plant Engineering Manager 1986

Plant Engineer Mechanical Systems 1985-1986



Site Location & Permitting Consultants

David Shapiro, CCSS, e-PRO

Senior Real Estate Consultant – United States for IPV Energy and IPV Energy Finance

- CCSS - Certified Commercial Sales Specialist
- CSP – Certified Short Sale Professional
- e-PRO – National Association of REALTORS® Certification of Proficiency in electronic media
- Sales Executive, Prudential Americana Group, REALTORS®
- Specializing in commercial real estate sales and leasing
- Industrial, Office, Warehouse, Shopping Center / Retail, Multi-Family, Vacant Land
- CCIM Candidate, National and Southern Nevada Chapter member
- Bachelor of Science degree in Graphic Communications, California Polytechnic State University (Cal Poly), San Luis Obispo, California
- 25 years in Construction Sales and Management



Engineering Systems Design Consultants

Steve Fortuna

Senior Systems Design Consultant for IPV Energy Corporation

2/2010 – Present: Solar Development Engineer, Constellation Energy, Baltimore, MD

Design, draft, propose and project manage commercial and utility grade Photovoltaic systems in MD, NJ, PA and NY on PPA. Constellation has self-funded 50 MW installed capacity in calendar year 2010, and I support 8 sales people in performing site surveys, production analysis, pro forma calculations, selecting subcontractors, expediting permitting and interconnection issues. Responsible for the MD Project Sunburst grant recipients, designing and pricing 31 systems of 500 kW up to 2 MW, Use AutoCAD, PVSyst, Solmetric Suneye, PV Watts and inverter configuration tools to design, model and specify photovoltaic production. Create layouts, 1 and 3 line drawings and specify thin film and mono-crystalline modules, inverters, combiners, disconnects and switchgear for grid-tied, utility scale installations, work with permitting and subcontracting authorities to deliver system on time and budget.

2/2009 – 2/2010: Sales Engineer, FLS Energy, Asheville, NC

Systems design, engineering and business development for solar thermal and photovoltaic systems to commercial and utility accounts through the Southeast. Create marketing materials, negotiated and signed wholesale agreements with Suniva, SMA and other vendors, form liaisons with green energy firms, financing institutions and contractors (LEED APs, facilities managers, energy auditors, solar installers, and carbon offset providers). Attend trade shows and networking events, perform site surveys, write proposals, create quotations and design drawings, manage sub-contractors. Identify partners, funding sources, write RFP responses & generate contracts.

- Wrote \$2 M federal renewable energy grant combining 9 partners and 18 solar installations.
- Designed and project managed a 1.4 MW array sold via PPA to Progress Energy

6/2007 – 2/2009: Service Delivery Engineer, Eastern Division, Charter Business, Duluth, GA

Design and implement cable and fiber based IP/networking solutions to business and government customers in the Eastern U.S. Establish, train and motivate outside sales force and channel partners. Specify, test, purchase and implement optical transport, firewalls, CWDM/DWDM Muxes and transponders, Metro Ethernet switches/routers and IP telephony gateways to offer cost effective telecommunications services to business clients. Design and test SONET and Metro Ethernet networks, OSS, provisioning and mapping systems to facilitate order fulfillment, managed \$5 MM capital budget. Responsible for generating over \$65,000 in new monthly recurring



Education:

BFA, New York University,
New York, NY, Cum
Laude, GPA 3.7
Ancillary and continuing
education courses at:
Wayne State Univ., Univ. of
Tampa, Univ. of Colorado
and Lanier Technical College

Memberships:

US Green Building Council
US and Georgia Solar
Energy Associations
Green Data Center Forum
Southface Builder Council
Green Chamber
of the South
Building Owners and
Managers Association
Society of Cable/Telephony
Engineers (SCTE)
Gearson Lehrman
Council of Advisers
North American Network
Operators Group (NANOG)
ATM and Metro
Ethernet Forums

Training/Certifications:

NABCEP Entry Level
Installer Cert., SunPower
Commercial Dealer Training
Southface LEED-AP Boot
Camp, PMP Cert., Six
Sigma Green Belt Training
TQM Methods &
Processes Improvement,
AutoCad, Visio
SolarGen Thermal
Installation, Cisco Certified
Network Associate
TCP/IP Internetworking
V Watts, PVSys, Solar
Pathfinder and RETScreen
NEC 690



revenue. Supported a 7 person sales staff achieving 148% of FY 2008 revenue goals. Left when company filed Chapter 11.

7/2006 – 7/2007: Data Architect/Consultant, Fortuna Consultant, Atlanta, GA

Network architecture design, project planning and implementation of Private IP, VPN and Advanced Voice/Data Solutions for fiber based network services. Clients included WebEx Communications, Verizon Business, Federated Systems, Argo Group, Charter Communications and others. Gather project requirements from executive and technical users; develop capacity, redundancy and QoS specs for service initiatives. Project management tasks include data center and infrastructure build outs (AC/DC/ATS) systems, process documentation, change management and life cycle maintenance. Scopes include network convergence planning, infrastructure design; HVAC, cooling tower and auxiliary power systems, (including flywheel, battery and diesel generation). Wrote white papers, sales collateral, technical diagrams, created RFI/RFPs, process flows, test and implementation plans.

1/ 2005 – 7/2006 Senior Sales Engineer, Cipher Trust, Alpharetta, GA

Product demonstration, technical design, evaluation management and project/implementation for leading Email Security and Encryption gateway. Company acquired by Secure Computing of Palo Alto.

- Supported 13 sales representatives - responsible for a projected \$35 MM in FY 2005 revenue.
- Demonstrated product features, configured solutions, supervised evaluations, and overcame all technical objections.
- Responded to RFP's for email security and encryption appliances.
- Integrated third-party encryption solutions (Voltage, PGP Universal, et.al.) into deployments.
- Trained resellers and customers on configuration policies and best practices.

11/2000 – 12/2004: Product Delivery Engineer, Level 3 Communications

Network design and sales support, VLAN/MPLS and virtual network design and sales support for products including: VoIP, IP Centrex (SIP/MGCP using Sonus and Sylanro gateways), MPEG video, Satellite Downlink interconnection, Transit IP, Frame/ATM encapsulation over MPLS (ATOM), Longhaul Ethernet Transport, Collocation, Dark Fiber, VPN and managed services. Responsible for all technical aspects of customer relationship for firms such as: Cox Communications, EarthLink, Switch & Data, Comcast and France Telecom. Specified optical and electrical interconnection to carrier networks, respond to technical RFP/RFI, calculate link loss budgets (OTDR), determine equipment, space and power needs, verify technical aspects of implementation, test and turn up. Worked with Six Sigma TQM process methodology to improve order entry, inventory control and trouble reporting into a unified database. Subject Matter Expert (SME) for MSO/Cable industry services Company sponsored membership on Cable Labs standardization committees.

- Helped sales team achieve >224% revenue attainment to quota performance.
- Responsible for all technical aspects of customer revenue stream reaching \$14 MM per month.
- Trained sales reps, customers and Channel Partners on new products.
- Developed product specs and cost outliers for SIP Trunking product.
- Represented company at DOCSIS and Packet Cable standardization meetings
- Winner of numerous Sales Engineer of Quarter and Customer Appreciation awards.



Tolga Tural

Senior Systems Design Consultant for IPV Energy Corporation

Electrical Engineer with extensive experience in semiconductor design and development on wired/wireless telecom, IC manufacturing product testing and processes in international and domestic arena is seeking professional opportunities in Renewable Energy System Engineering Management Field (Wind/Solar). Principal Strengths include:

- Adds value and participate in various areas of semiconductor design, development and testing while striving to explore new and more efficient processes
- Proven technical expertise and attention to detail
- Strong initiative to complete assignments with highest quality
- Consistently demonstrate resourcefulness to simulate and test against extraordinary circumstances increasing the quality and durability of products
- Proven to be an excellent and strong problem solver, versatile and a quick learner
- Possess strong work ethic with excellent communication skills
- Broad knowledge of customer support, manufacturing processes and product cost savings

Keywords: Autodesk AutoCAD , PV*SOL, PVSyst, NREL SAM(Solar Advisor Model), Solmetric SunEye, 2008 NEC Code Criteria, LCOE analysis and financial proforma, UL1741,1703, IEEE 519, IEEE 1547, Hands on PV installation, NABCEP, PV Economics, Google Sketch-up, Google Earth, PVWATTS, Solar Quick Quotes, Wind Farm Design, GHWindFarmer, Wind resource and flow analysis, WAsP, Wind MCP analysis, Software, MS Office Applications, PI/PID control systems, MATLAB/Simulink, C, Perl, ASIC/FPGA design, DSP techniques, IC design, Analog layout design and implementation, IC manufacturing testing(ATE), Statistical Measurement Analysis.

Career Highlights:

- Developing renewable energy projects including energy production estimation, feasibility, financial proforma analysis, life cycle cost analysis, PPA, tax incentives, project management.
- Created an internal generic tool (connects SPW modeling to hardware verification) during 3G WCDMA modem component ASIC design development and demonstrated significant turn-around time reduction in design verification process
- Designed generic test bench structure ensuring reusability across

Education:

Oklahoma State University,
Stillwater, OK
Master of Science:
Electrical Engineering
Turkish Student
Organization Secretary
at Oklahoma State
University (1995)

Yildiz Technical University,
Istanbul, Turkey
Bachelor of Science:
Electrical Engineering
Received the second
highest score in a
nationwide test given by
the Turkish Government
and a scholarship to study
in the USA. (1992)

Professional Activities:

Presented "PV Design,
PV Economics and PV
market in Turkey" to
ANSIAD (Antalya Business
Association) members
in Turkey (June 2009)
Attended ASES Solar-2009
Conference at Buffalo, New
York on May 11-16, 2009

Memberships:

IEEE
AWEA (American Wind
Energy Association)
SEI (Solar Energy
International)
ASES (American Solar
Energy Association)
NESEA (North East
Sustainable Energy
Association)



multiple component design which minimized RTL test bench development time significantly

- Explored and re-designed existing 3G WCDMA ASIC modem power control algorithm and reduced algorithm processing time by factor of 10 and memory size by factor of 2.
- Demonstrated ability to become responsible for a large number of different designs while supporting different development stages within a short period of time
- Architected, designed, verified, delivered and supported multi memory RTC radar channelizer which is the largest and the most complex FPGA design in the company's history for Aeroflex.
- Designed and delivered CSIX2NPSI bridge FPGA design to Teradient Networks which was demonstrated in Supercomm-2003 conference.
- Contributed and applied design on reusability methodology by designing standard configurable RTL and test bench components. This methodology reduced test and development time and cost and significantly improved time-to-market
- Introduced and released Zarlink Semiconductor MT9074, MT9075B, MT9076B products into full production with complete mixed signal test development.
- Optimized and Improved total wafer probing and production test time from 3 seconds to 1.8 seconds per part to reduce production cost significantly (millions of dollars).
- Trained mixed signal test engineers and technicians to off load released products (NPI) to be maintained ongoing support.

Constellation Energy Group Fortune 500, CEPS(Constellation Energy Project and Services Group), Baltimore, MD,USA(01/2010)

- Senior Project Engineer (Utility –Large Commercial Scale Solar PV and Wind)
- Projects: 10MW (Solar Ground Mount), 17 MW (Solar Ground Mount), 1.8 MW McCormick (Solar Rooftop), 1.3MW Schuykill Mall, PA (Wind)
- Performing and/or reviewing detailed financial analysis, including life cycle cost analysis, cashflow statements and proformas that capture all operating, maintenance and replacement costs.
- Utilizing modeling tools such as production estimating tools, financial modeling tools, and/or material optimizing methods to validate most appropriate design and material solutions. Work with other departments to provide best estimating and modeling information.
- Developing structural and electrical design drawings for solar electric systems that meet all national, provincial, and local code requirements as well as requirements of all other stakeholders.
- Coordinating with and manage detailed design activities from professionally licensed engineering support.
- Managing the submission of drawings to the appropriate agency in order to obtain construction permits.



- Coordinating the development of a bill of material for each project based on the final approved design.
- Providing technical input to support the interconnection application and utility approval process.
- Providing support during the inspection of system installations in order to obtain final inspection approval.
- Preparing Project Feasibility Report including system size, risk analysis, financial cost structure, capacity factor analysis, government incentives

Smart Energy Group, Florham Park, NJ, USA, Senior PV Systems Engineer (MW scale Commercial Applications) (04/2009-01/2010)

- Developed advanced shading analysis methodology and tools to minimize multiple site visits and solar measurement snapshot collection.
- Developed PTC String Sizing and NEC Wire Sizing Push button automated programs to reduce engineering design and development time.
- Developed 5 steps solar engineering process and plan to complete/deliver high quality PV system design
- Prepare and work on Procurements
- Responsible all aspects of DC 700KW Commercial Rooftop PV system design include preparing engineering feasibility report (system pricing and economic analysis, design documents (Advance shading analysis report, racking design requirements and weight analysis, Auto-Cad drawings, inverter selection location and design requirements, interconnection requirements, single line diagrams, wire sizing, 2008 NEC code compliance, bill of materials), construction documents and construction management docs
- Prepared 50 initial engineering feasibility report

Interdigital Communications LLC, King of Prussia, PA, USA

ASIC/DSP Staff Engineer (06/2007 to 04/2009)

Senior Design Consultant (07/2005 to 06/2007)

Modelware, Inc, Red Bank, NJ, USA

Senior Design Engineer (10/2001-06/2005)

Coree Networks, Tinton Falls, NJ, USA

Senior Design Engineer (05/2001 to 10/2001)

PMC-Sierra Inc, Ottawa, Ontario, Canada

Product Design Engineer (04/2000 to 05/2001)

Zarlink Semiconductor, Ottawa, Ontario, Canada

Mixed Signal Product Development Engineer (10/1996 to 04/2000)



Turkish Paper Mill Industries, Kocaeli, Turkey

Power Electronics Process Control Engineer (01/1996 to 07/1996)

Training & Certifications:

- NABCEP PV Knowledge Certification (Dec 2009)
- Hands on PV Installation Certification from Florida Solar Energy Center/University of Central Florida Research Center (Dec 2009)
- GarradHassan WindFarmer Certification (Sept 2009)
- GarradHassan Commercial Wind Farm Design Certification (Sept 2009)
- PV System Design for Engineers from High Sun Engineering (Sept 2009)
- Kaco Solar Grid-tie Inverter Training Certification (July 2009)
- SEI Advanced PV design and NEC Criteria Certification (June 2009)
- NEC-code Compliant Grid-Tie PV System Design & Installation Certification (May 2009)
- BP Solar Integra Hands on PV Installation (May 2009)
- Conergy Solar Success Training towards NABCEP CEU Credit Certification (May 2009)
- Xantrex Residential Grid Tie Solar Inverter product knowledge and Installation Training Certification (May 2009)
- OnGrid Solar Economics of Solar Training (May 2009)
- SEI PV Design and Installation Certification (2003)
- Leadership Core skills Certification (2000)
- Perl and Tcl/tk programming Certification (1999 and 2000)
- DSP Test Engineering Certification (1999)
- Integrated Circuit Trends, Quality, Defects, Testing and Reliability Certification (1997)
- LTX Synchro Mixed Signal ATE Testing Certification (1996)



George Van Hoesen

Senior LEED Design Consultant for IPV Energy and IPV Energy Finance

George Van Hoesen specializes in sustainable building and design as a green building consultant and managing partner with Global Green Building LLC. Areas of expertise include green community design, environmental planning, energy efficient design and construction, geothermal ventilation systems, alternative waste water management systems, educational training and speaking and low impact development services.

George has a Masters Degree in Natural and Applied Sciences from Missouri State University. His areas of study included Community Planning, Environmental Law, Environmental Design and Systems Design. For his master's thesis he designed and studied a geothermal ventilation system. The patented system uses current technology in a new way to substantially improve the efficiency of heat pumps by using direct geothermal ground source technology. George has been trained in the LEED process for New Construction (LEED-NC) and Low Impact Development (LID). He is a member of the US Green Building Council, Water Quality Coordinating Committee for the State of Missouri, Sustainable Land Development International (SLDI), James River Basin Partnership and the Green Building Institute. George is a founding member of the Ozarks Green Building Coalition. George has done educational speaking for the Department of Defense, Missouri State University Environmental Coalition and the Southwest States Resource Conservation and Development Conference (RC and D), the League of Women Voters and several community wide organizations.

George's designs include the planned zero carbon footprint, low impact development of Riverdale, just south of Springfield, Missouri on the Finley river. The Riverdale design has a unique hydroelectric facility using many facets of new and existing technology coupled with concern for historic preservation and conservation of natural resources to bring together a sustainable community.

George has been involved with policy development at local, county and state government levels to integrate green practices within community and rural settings in the state of Missouri. He maintains a proven relationship with the Environmental Protection Agency (EPA), Department of Natural Resources (DNR), Missouri Department of Conservation (DOC) and the Natural Resources Conservation and Development group (RC&D). His involvement in county code changes include developing environmental sewer system codes that allow zero discharge sewer systems that protect the natural environment by eliminating all sewer discharge and reducing the need for individual septic



systems. These zero discharge sewer systems reduce the need for Total Maximum Daily Load (TMDL) by using a subsurface drip irrigation system that naturally cleanses and recharges the ground water.

As a green building consultant, the task is to educate the customer and reevaluate building and design needs, keeping in mind a more sustainable plan that uses a common sense approach with locally available resources and renewable energy options.





Projects & Capabilities



Project Type:
Municipal Lighting Project
Primary School / Off-Grid

Size:
N/A

Location:
Peoples Republic of China

IPV Supply Chain Manufacturer:
Zhejiang Solar Best Energy
Technology Company Limited

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





1.5MW Project for the Solar Plant in Spain

- Installation location: a city of 300 miles away from Madrid, Spain
- System size: 1.5MW
- Panel: SOLARBEST ZSB-M180, 180Wp

Project Type:
Utility Grade Solar Installation

Size:
1.5MW

Location:
Spain

IPV Supply Chain Manufacturer:
Zhejiang Solar Best Energy
Technology Company Limited

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



100KW Solar Roof in Italy

Our Projects Abroad

- Installation location: Moglia, Italy
- System size: 100KW
- Panel: SOLARBEST ZSB-M180

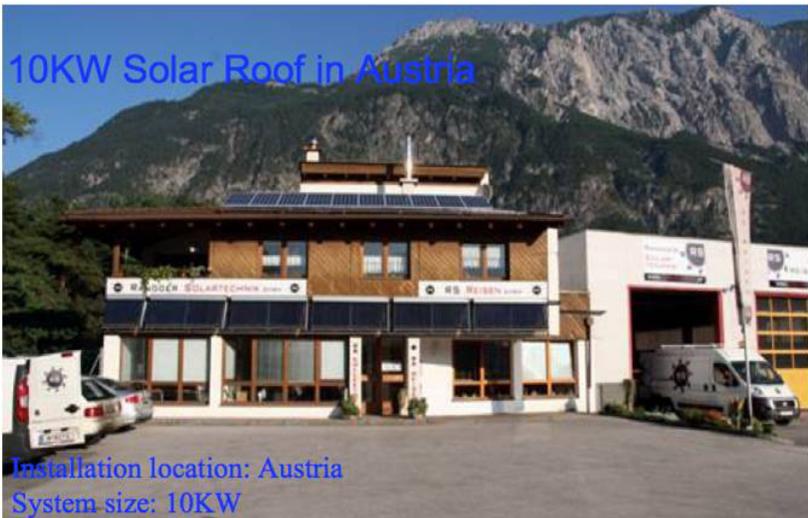
Project Type:
Residential Installation

Size:
100 KW

Location:
Moglia, Italy

IPV Supply Chain Manufacturer:
Zhejiang Solar Best Energy
Technology Company Limited

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



10KW Solar Roof in Austria

Installation location: Austria
System size: 10KW

Project Type:
Commercial Installation

Size:
10KW

Location:
Austria

IPV Supply Chain Manufacturer:
Zhejiang Solar Best Energy
Technology Company Limited

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





Project Type:
Utility Grade Solar Installation

Size:
5MW+/-

Location:
Spain

IPV Supply Chain Manufacturer:
Wonderful Solar

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Utility Grade Solar Installation

Size:
N/A

Location:
Spain

IPV Supply Chain Manufacturer:
Wonderful Solar

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Utility Grade Solar Installation

Size:
N/A

Location:
Germany

IPV Supply Chain Manufacturer:
Wonderful Solar

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain





Project Type:
Commercial Solar Installation

Size:
N/A

Location:
Germany

IPV Supply Chain Manufacturer:
Wonderful Solar

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Solar Installation

Size:
N/A

Location:
Germany

IPV Supply Chain Manufacturer:
Wonderful Solar

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Solar Installation

Size:
1.15MW

Location:
Austria/Czech Republic

IPV Supply Chain Manufacturer:
FitCraft Production

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain





Project Type:
Commercial Solar Installation

Size:
1.35MW

Location:
Dyjakovice, Czech Republic

IPV Supply Chain Manufacturer:
FitCraft Production

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Solar Installation

Size:
3.2MW

Location:
Vimperk, Czech Republic

IPV Supply Chain Manufacturer:
FitCraft Production

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Utility Grade Solar Installation

Size:
.65MW

Location:
Miroslav, Czech Republic

IPV Supply Chain Manufacturer:
FitCraft Production

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain





Project Type:
Utility Grade Solar Installation

Size:
1.60MW

Location:
Unanov, Czech Republic

IPV Supply Chain Manufacturer:
FitCraft Production

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain





Project Type:
Utility Grade Solar Installation

Size:
1.10MW

Location:
St. Lhota, Czech Republic

IPV Supply Chain Manufacturer:
FitCraft Production

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



FitCraft Production – Projects built in 2009 (No Photographs Available)

Velke Tesany, Czech Republic
Total power: 6.03 MW

Barice Czech Republic
Total power: 1.08 MW

Brno Airport Czech Republic
Total power: 20 MWp

Velke Nemcice Czech Republic
Total power: 1 MW

All the above projects involved materials, professional services and financing from the IPV Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
1100KW

Location:
Landau, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
880KW

Location:
Bologna, Italy

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
80KW

Location:
Aschaffenburg, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
47KW

Location:
Rodermark, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
42KW

Location:
Schaafheim, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
31KW

Location:
Dewangen, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
37KW

Location:
Aalen, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
22KW

Location:
Kalianstadten, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
31KW

Location:
Ecquevilly, France

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
30KW

Location:
Aalen, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
25KW

Location:
Pfeffenhausen, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
22KW

Location:
Aalen, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
18KW

Location:
Grobostheim, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
3KW

Location:
Alsace, France

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
36KW

Location:
Alsace, France

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
11.34KW

Location:
Teplice, Czech Republic

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
8.8KW

Location:
Greisheim, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
14.4KW

Location:
Rottenburg, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
12KW

Location:
New Delhi, India

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
135KW

Location:
Noida, India

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
1.5KW

Location:
Surat, India

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
158KW

Location:
New Delhi, India

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
2.42KW

Location:
NL, France

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Utility Grade - Ground
Mounted Installation

Size:
978KW

Location:
Cagliari, Italy

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain





Project Type:
Utility Grade - Ground
Mounted Installation

Size:
700KW

Location:
Nordendorf, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Utility Grade - Ground
Mounted Installation

Size:
1000KW

Location:
St. Maxime, France

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
3.2KW

Location:
Como, Italy

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
3.2KW

Location:
Kirkel, South of Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
5.5KW

Location:
Sailauf, South of Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
31KW

Location:
ESB, Ireland

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain





Project Type:
Commercial Rooftop
Solar Installation

Size:
20KW

Location:
Parma, Italy

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
33.66KW

Location:
O Fiach College, Ireland

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Commercial Rooftop
Solar Installation

Size:
135KW

Location:
Saijo-City, Japan

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain





Project Type:
Utility Grade - Ground Mounted

Size:
4554KW

Location:
Pfeffenhausen, Germany

IPV Supply Chain Manufacturer:
Moser Baer

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Solar Lighting

Size:
N/A

Location:
Nigeria

IPV Supply Chain Manufacturer:
Sunny Energy

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



Project Type:
Utility Grade - Roof Mounted

Size:
1.6MW

Location:
Airport - Madrid Spain

IPV Supply Chain Manufacturer:
Sunny Energy

IPV Participation:
Manufacturing Supply Chain
Professional Services Supply Chain
Financial Supply Chain



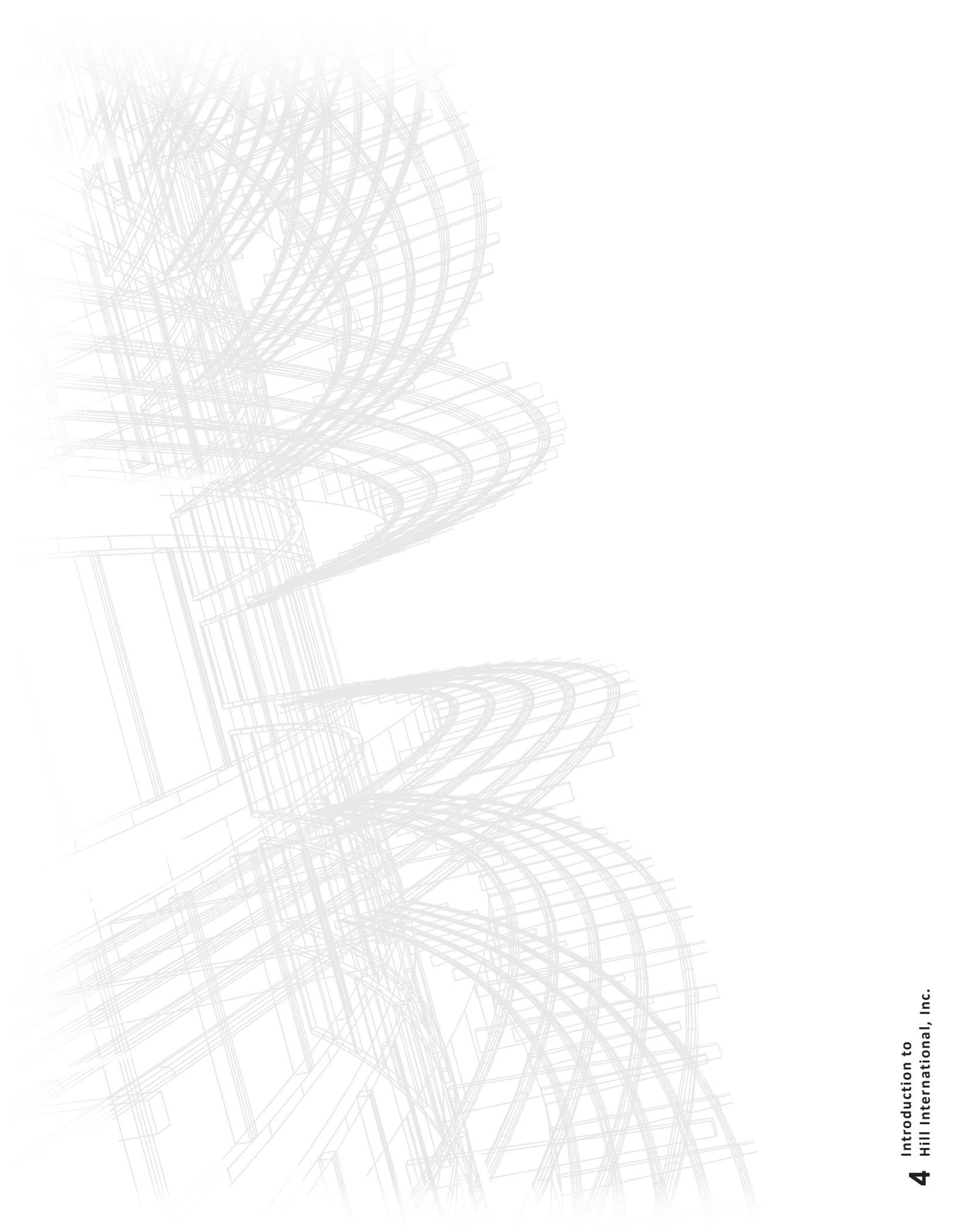


Project Type:
On Grid Power Station

Location:
Xiashan Airport - Hongzhou, China

IPV Supply Chain Manufacturer:
Sunny Energy





Firm Profile

Project Management Services

- Program Management
- Project Management
- Construction Management
- Project Management Oversight
- Troubled Project Turnaround
- Staff Augmentation
- Project Labor Agreements
- Labor Compliance Management (MyLCM®)
- Management Consulting
- Commissioning
- Estimating and Cost Management

Construction Claims and Consulting Services

- Claims Consulting
- Litigation Support
- Expert Witness Testimony
- Cost and Damages Assessment
- Delay and Disruption Analysis
- Adjudication
- Lender Advisory
- Risk Management
- Forensic Accounting
- Fraud Investigation
- Project Neutral®

Profile

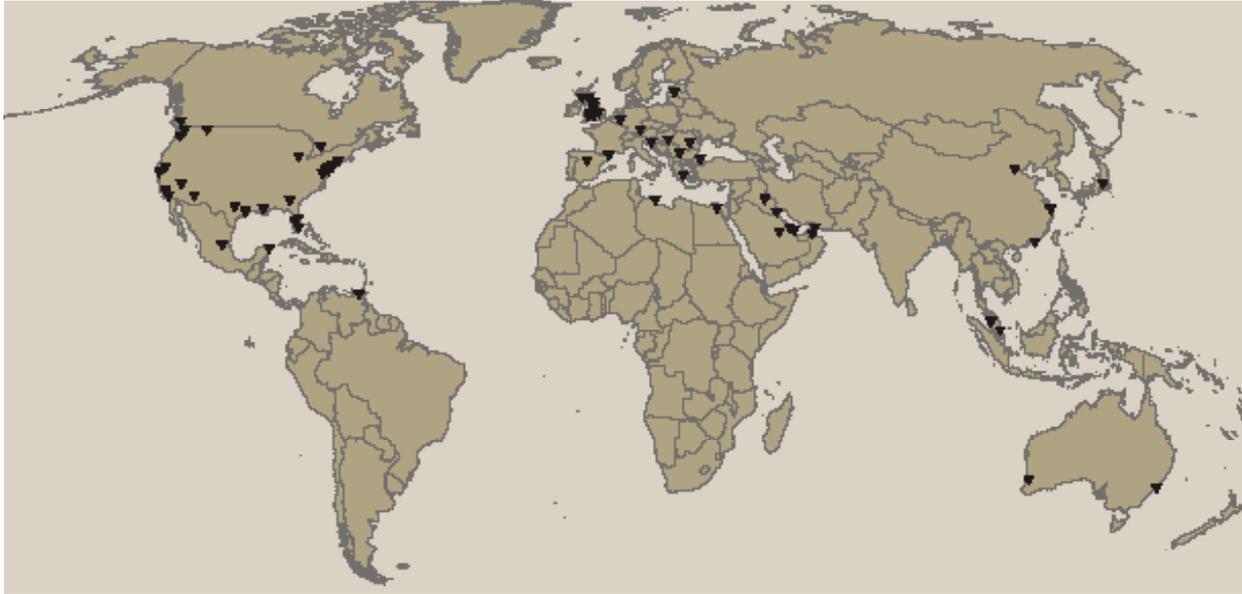
HILL
LISTED
NYSE

Hill International, Inc. (Hill) is a leading international construction consulting firm that provides program and project management, construction management, cost engineering and estimating, quality assurance, inspection, scheduling, claims analysis, innovative dispute resolution, and staff augmentation services to clients involved in major construction projects worldwide. Hill has the expertise and experience to manage major projects from concept to successful completion. We have successfully managed more than 5,000 projects with a total construction value over \$250 billion, and we are **the largest pure construction management firm in the country**. Hill is a publicly-traded company listed on the New York Stock Exchange.

Hill is also an international leader in construction claims management, considered to be **the largest construction claims firm in the world**. Founded in 1976 as a multi-disciplined management consulting firm that helps construction participants minimize risks, Hill has developed a reputation for our innovative approaches to preventing and resolving construction schedule and cost overruns. We offer public and private clients a full spectrum of construction-related services that enable them to complete construction on time and within budget while minimizing claims and other problems. Hill has helped our clients resolve more than 25,000 claims and disputes valued at more than \$100 billion.

Organizational Structure

Hill is structured along two primary business lines: Project Management and Claims Management. The two business lines are further organized geographically, with worldwide headquarters in Marlton, NJ.



North America

Atlanta, GA
 Baltimore, MD
 Bellevue, WA
 Bensalem, PA
 Boise, ID
 Boston, MA
 Cancun, Mexico
 Chicago, IL
 Dallas, TX
 Danbury, CT
 Granite Bay, CA
 Houston, TX
 Irvine, CA
 Las Vegas, NV
 Little Falls, NJ
 Marlton, NJ (Headquarters)
 Miami, FL
 New Orleans, LA
 New York, NY
 Orlando, FL
 Philadelphia, PA
 Phoenix, AZ
 Portland, OR
 Spokane, WA
 Tampa, FL
 Toronto, Ontario (Canada)
 Vancouver, BC (Canada)
 Washington, DC

South America

Trinidad and Tobago

Europe

Ankara, Turkey
 Athens, Greece
 Baku, Azerbaijan
 Barcelona, Spain
 Belgrade, Serbia
 Birmingham, UK
 Bristol, England
 Bucharest, Romania
 Cardiff, Wales
 Daresbury, England
 Dusseldorf, Germany
 Edinburgh, Scotland
 Exeter, England
 Glasgow, Scotland
 Krakow, Poland
 Leeds, UK
 London, UK*
 Luxembourg
 Madrid, Spain
 Manchester, UK
 Munich, Germany
 Riga, Latvia
 Rijeka, Croatia
 Tbilisi, Georgia
 Teesside, UK

Warsaw, Poland
 Winchester, UK
 Wroclaw, Poland

Middle East/Africa

Abu Dhabi, UAE*
 Ajman, UAE
 Baghdad, Iraq
 Cairo, Egypt
 Doha, Qatar
 Dubai, UAE*
 Jeddah, Saudi Arabia
 Manama, Bahrain
 Riyadh, Saudi Arabia
 Sharq, Kuwait
 Tripoli, Libya

Asia, Australia

Beijing, China
 Hong Kong, China
 Kuala Lumpur, Malaysia
 Shanghai, China
 Singapore
 Sydney, Australia
 Tokyo, Japan

**Multiple office locations*

Personnel

Hill International employs more than 2,300 professionals and support personnel in 80 offices in 35 countries worldwide. Our staff includes architects, engineers in all construction and building-related disciplines, planners, schedulers, estimators, value engineering specialists, construction managers worldwide, resident engineers, construction inspectors and a full range of technical and support staff to represent owners. The table on the right provides a breakdown of our professional staff by discipline.

Services

Construction Management

Successful construction management (CM) demands a detail-diligent approach, proactively managed by professionals who have the experience, skills and technical support each project demands. Hill's professionals are not only credentialed; they have seasoned, hands-on experience in the construction industry. This experience, gained in the trenches of construction projects across the globe, gives our project teams the practical knowledge they need to effectively manage virtually any type of capital project. Hill's CM teams include construction managers, resident engineers, construction superintendents, estimators, schedulers, inspectors, contract administrators and construction claims avoidance experts.

Program Management

Hill's comprehensive program management services help clients keep multiple, interrelated projects in-sync, on-time and within budget. We help owners, financial institutions, sureties and others reduce the uncertainty and risk in their capital programs. Hill's managers review every detail of all projects, set-up objectives, plans and priorities, manage and control the process, and identify and resolve problems. Our experienced professionals and technical resources work with the client to define, plan, implement and integrate every aspect of each project. When managing an entire multi-disciplinary program, our service improves timing, cost and quality. Our client benefits from a single point of management responsibility for planning, design management, permitting compliance, construction management and ongoing operations services.

Professional Staff by Discipline

Accounting	35
Administration	273
Architects	83
Attorneys/Claims Analysis	102
Chemical Engineer	2
Civil Engineers	129
Communication Engineer	7
Computer Specialists	48
Construction Inspectors	75
Construction Managers	124
Contract Administrators	64
Cost/Accounting Engineers	63
Economists	7
Electrical Engineers	50
Environmental Engineers	13
Estimators	32
Landscape Architects	17
Management Consultants	29
Mechanical Engineers	60
Planners: Urban/Regional	5
Project Controls	13
Project Managers	269
QA/QC	13
Safety Engineers	1
Schedulers	75
Structural Engineers	22
Surveyors	26
Technicians	19
Transportation Engineers	13
Other	704
TOTAL	2,372

Project Management

Hill has developed its project management approach based on extensive Project Management assignments and claims experience, which gives us a unique and in-depth understanding of what can go wrong on a project. We use this knowledge to identify potential trouble spots on a project before they develop into problems and to recommend or initiate preventive action through strategic planning and controls. We vigilantly watch over all aspects of a project, from design review and long-lead items through schedule and budget updates and inspection during construction. As Project/Construction Manager or Owner's Representatives, Hill has managed all phases of the construction process from pre-design through completion, including cost/budget controls, scheduling, estimating, expediting, contract administration, inspections, and control of contractors and suppliers.

Project Management Oversight

Our project management oversight (PMO) services support project success by independently anticipating problems, identifying setbacks and recommending solutions in every project phase. This is the essence of PMO: to give clients objective information, allowing them to make prudent decisions about key issues before major problems occur.

Hill's PMO teams provide timely and objective reporting, from evaluating the performance of the construction manager, designer and contractors, to monitoring schedules, analyzing costs, and identifying and managing project risks. Teams include specialists in all phases of construction, so that the myriad events that occur on a project can be assessed and evaluated in a timely way by the right expert. Because Hill's staff includes experts who are leaders in their disciplines, our clients benefit from strong recommendations that are both technically and financially sound.

Claims Consulting

Even the most carefully planned construction project can encounter claims. How those claims are handled, however, can make a difference in the success of the project. Hill's approach to claims resolution is broad-based and relies on the participation of Hill's multi-disciplined staff of engineers, architects, attorneys, contract administrators, construction managers, accountants and scheduling specialists. Such a range of expertise is essential in analyzing the often complex liability, causation and damage components of a claim. Hill's technical and contract experts conduct a detailed analysis of the claims, break them down event-by-event and issue-by-issue, to help facilitate resolution. By reviewing and analyzing all relevant project documents and performance data, our team can help get to the root of any dispute.

Staff Augmentation

Not all of today's organizations have the internal resources to handle every type of assignment. Hill's experienced project managers, construction managers, engineers, architects, designers, schedulers, financial analysts, contract administrators and other professionals are available at a moments notice to staff virtually any type of project at any phase. Hill's staff augmentation teams are developed based upon

the unique needs of each individual assignment and are available for durations that range from days to years. Our professionals take a results-driven yet cooperative approach to meeting our clients' goals; this two-pronged methodology effectively complements existing permanent staff throughout the globe.

Project Controls

Hill provides state of the art project controls systems and as part of our project management services. Our systems incorporate schedules, budgets, and contract administration meeting the needs of today's clients for successful control of and timely, accurate information on cash flow needs, costs, schedules, changes, progress (status), claims, material, equipment and labor. Hill provides state-of-the-art project controls using software customized to meet client needs.

We have worked extensively with performance measurement techniques to manage project schedules. Our computerized system helps monitor schedule and cost information by keeping track of thousands of activities and flagging those requiring management attention. Hill's nationally known experts in CPM scheduling can analyze contractors' project schedules, advise management of the accuracy of these schedules, and present effective assessments and recommendations, thereby minimizing potential problems.

Hill provides estimating services in order to provide a basis from which to award bids and to forecast and manage total capital cost. Contract administration is an important function that supports the project through change order management control resulting in minimal claims costs for the project.

Cost Estimating

Hill has successfully prepared cost estimates on projects ranging from the thousands to the billions in support of planning, design, construction, renovation, operation and maintenance, as well as change order negotiations and claims support. Hill ensures accurate estimation of construction costs by involving the client and the architectural and engineering staff on construction project cost estimates. Budgetary and detailed cost estimates are developed in accordance with client's protocols. Vendor quotes are solicited, where appropriate, local material costs are obtained from suppliers in the vicinity of the project and labor productivity rates are derived from project experience and history. Hill uses a combination of the *MC²* estimating program with *On Center Take Off*. In addition Hill maintains *RS Means Cost Works* and the US Army Corps of Engineers' *Micro Computer-Aided Cost Engineering Program* as Estimating systems/software.

Hill's Estimating and Cost Management Services include: Master Budget Planning, Conceptual Budget Estimates, Estimates at 60%, 95% & 100% CDs, Project Work Schedules, Constructability Reviews, Value Engineering, Change Orders Administration, Long Lead Items Identification and Document and Information Control Systems.

Scheduling

Hill's nationally known experts in CPM scheduling can analyze contractors' project schedules, advise management of the accuracy of these schedules, and present effective assessments and recommendations,

thereby minimizing potential problems. A team of Hill professionals with in-depth industry experience will evaluate your project's schedule and identify all possible pitfalls in scope, logic, sequence and duration. They will help sort out critical vs. non critical activities, evaluate resource loading and perform "What If" and "Time-Window Based" analysis. Hill's experts utilize the most sophisticated methods for establishing and evaluating schedule conflicts, analyzing delays/acceleration, conducting productivity analysis, auditing costs and determining damages.

Project Labor Agreements

Hill helps both public and private organizations who have large, complex construction projects save time and money through a type of collective bargaining agreement called a Project Labor Agreement (PLA). PLAs create efficiencies through standardization of project participant contracts. They help avoid conflict issues between contractors who are working a large project and help protect against strike conditions. Hill will work with all parties involved with the project; owners, contractors, and unions to unify their contractual relationship. The end result is a tremendous savings in both time and money through standardization efficiency.

Labor Compliance Management

Our leading state-of-the-art web-based software — MyLCM® — is a service application used to collect, monitor, and manage certified payrolls. This service can replace labor- and paper-intensive manual processes of complying with local, state, and federal Davis Bacon prevailing wage laws or Project Labor Agreements. Reporting processes that traditionally entailed hours, weeks, or months to gather, analyze, and format data for submittal can now be accomplished in a matter of minutes. Within secure and encrypted databases and architecture, Hill maintains prevailing wage rates that are applicable to our clients. The system uses this data to validate wage requirements by comparing contractors' certified payrolls against applicable prevailing wage rates, and quickly alerts the client to possible errors or omissions by a contractor. This process is cost-effective and ensures verification on every submitted certified payroll while allowing clients to focus attention on enforcement.

Troubled Project Turnaround

Hill offers remedial services to turn troubled projects into productive investments. Hill has successfully rescued projects from poor management and planning, work stoppages, regulatory intervention, labor issues, and countless other factors which resulted in extensive delays, cost overruns and expensive construction claims exposure. Our clients for these projects have included private corporations, lending institutions, and public agencies.

Construction Dispute Resolution Services

As a world leader and innovator in the field of construction claims management, Hill has participated in the resolution of thousands of construction claims. We have developed a staff of professionals who are

expert at examining construction documents, schedules, and inspecting work to identify relevant issues and solutions. Our claims services include claims resolution, case strategy, issue analysis, establishing causation, cost recovery, damage analysis, delay analysis, litigation support, expert witness testimony and support, mitigation, prevention programs, training programs, and other management support.

Summary

The combined resources of the Hill staff allows us to provide such services as project management, project controls, engineering, design, construction management, and claims management to major commercial and industrial, federal, state, and local government clients. Hill provides a level of expertise not available elsewhere, and can offer clients the professional consulting services necessary to successfully manage all aspects of capital projects, from inception through close-out and occupancy.

Industry Sectors Served

For over a quarter century, clients worldwide have selected Hill as consultants on their most complex projects. Each client has unique needs and goals, yet they choose Hill because they need experts who can prevent problems, minimize risks and eliminate surprises. Our mission: to meeting our clients' diverse needs in handling project risk and exceed their highest expectations.

Hill offers a full spectrum of services to assist our clients in successfully managing major capital, investment and technical assistance programs, from initial feasibility studies, to planning and design, to procurement and construction, to start-up and operation, and finally, through implementation and contract close-out. Hill has served public and private sector clients in a wide range of sectors, including those listed below.

Buildings

Apartment/Housing Facilities
Commercial Office Buildings
Educational Facilities
Entertainment Facilities
Government Facilities
Hospital/Healthcare Facilities
Hotels, Casinos and Resorts
Religious Facilities
Retail Facilities
Sports Facilities
Theme Parks and Zoos

Transportation

Airports
Bridges
Ports and Harbors

Rail and Transit

Roads and Highways
Tunnels

Industrial and Process

Cement and Aggregates
Chemical
Pharmaceutical
Pulp and Paper
Steel and Metal

Environmental

Hazardous Waste
Sewerage and Solid Waste
Water Supply
Manufacturing

Manufacturing Facilities

Vehicles

Power

Cogeneration Facilities
Fossil Fuel Power Plants
Nuclear Power Plants
Hydroelectric Facilities
Waste-to-Energy Facilities
Major Transmission Lines
Substations
Renewable Energy

Petroleum

Telecommunications/ Technology



Alann M. Ramirez, PE

Senior Vice President

Alann M. Ramirez is an expert in construction and project management practices. Mr. Ramirez has been with Hill International for over 20 years. His expertise includes:

- Project management oversight and consulting on large, complex, construction projects;
- Consulting on project implementation plans, construction contracting, project delivery approaches, risk management, and project management practices.
- The evaluation, preparation, and defense of construction claims: claim strategy; schedule, delay, and lost productivity analyses; constructive acceleration; design errors and omissions; change order impacts, terminations, and wrongful terminations; and damage claims.
- Lectures and seminars on a variety of construction related issues. Formerly, adjunct instructor at Drexel University in the graduate M.S. Engineering Management and undergraduate Construction Management programs.

Mr. Ramirez has been involved on projects such as: tall buildings, office buildings, wastewater treatment plants, airport terminals, light rail and intercity rail lines, rail car manufacturing, power generation and cogeneration plants, shipyards, hazardous waste remediation, pharmaceutical, petrochemical, mining and refineries, schools, and other commercial and industrial facilities.

Mr. Ramirez has been involved in a variety of Alternative Dispute Resolution processes, including mediation, arbitration, and settlement negotiations, as well as acting as a fact-finding independent neutral.

Cosumnes Power Plant, Sacramento, CA

Mr. Ramirez led Hill's expert team, on behalf of the owner-utility, to investigate design and construction issues and damages caused by a terminated general contractor on this 2x1 (GE 7FA gas turbine) 500 MW combined cycle power plant.

Harquahala Generating Station, AZ

Mr. Ramirez prepared comprehensive delay and technical analyses on behalf of the owner of this \$530 million, 3-unit, 1080MW combined cycle power plant project (with Siemens 501G gas turbines). The value of the dispute exceeded \$50 million. He testified in arbitration.



Education:

J.D., Law, Delaware Law School of Widener University, 1988
B.S., with Honors, Marine Engineering, United States Merchant Marine Academy, 1977
Graduate Coursework, Technology Management, University of Maryland, 1999-2001, 0

Registrations:

Pennsylvania Bar
Professional Engineer, Pennsylvania
Professional Engineer, California
General Engineering Contractor, California

Covert Generating Station, Covert, MI

Mr. Ramirez prepared comprehensive delay and technical analyses on behalf of the owner of this \$544 million, 3-unit, 1080MW combined cycle power plant project (with Mitsubishi 501G gas turbines). The value of the dispute exceeded \$50 million. He testified in arbitration.

County of Solano Cogeneration Plant Expansion Project, Solano County, CA

On behalf of Chevron Energy Solutions, the design-build contractor, Mr. Ramirez provided delay, disruption, and cost overrun analyses. The project involved energy system upgrades to the Hall of Justice, infrastructure, and other buildings, and included adding a new diesel generator and cogeneration system, and a new central plant project.

Point Aconi Power Plant, Nova Scotia, Canada

Managing the expert team on behalf of the developer, Mitsui, Hill International performed a comprehensive investigation of mechanical and electrical systems design, construction performance, and schedule, delay, and cost issues on this coal fired 165MW Pyropower circulating fluidized bed (CFB) power plant, which at the time was the largest of this type in the world. The construction contract was \$127 million with the contractor seeking an additional \$54 million.

Calvert Cliffs Nuclear Power Plant Steam Generator Replacement, Units 1 & 2, MD

Mr. Ramirez participated in a high level, independent Project Management Oversight (PMO) of the planning, design, procurement, manufacturing, and outage program for this multi-year project on behalf of the owner, Baltimore Gas & Electric.

Calvert Cliffs Diesel Generator Project, MD

Mr. Ramirez managed this Project Neutral assignment, involving Bechtel and Baltimore Gas & Electric in a dispute of over \$12 million, which was successfully resolved within a few months. The project involved the addition of NRC required standby emergency diesel generators.

Quetta Combined Cycle Power Plant, Fiat Avio, Quetta, Pakistan

Mr. Ramirez managed the analysis of delays and cost overruns for a 140MW gas-fired (GE LM6000 gas turbine) combined cycle power plant on behalf of a turnkey contractor, Fiat Avio, with a \$53 million dispute.

WPPSS Hanford Unit 2, WA

On behalf of General Electric, Mr. Ramirez participated in a team of Hill consultants to resolve numerous design, construction, and delay issues on behalf of the NSSS supplier. He evaluated bulk construction progress, defects in quality assurance, trade interferences, design change impacts, and resource staffing for mechanical and piping systems.

Shoreham Nuclear Power Plant, NY

On behalf of General Electric, Mr. Ramirez participated in a team of Hill consultants to resolve numerous design, construction, and delay issues on behalf of the NSSS supplier. He evaluated bulk construction progress, design change impacts, and mechanical and piping system issues.

Burlington Unit No. 10 Rehabilitation, Public Service Electric and Gas, NJ

Mr. Ramirez performed an assessment of the existing project management programs, procedures, and their effectiveness for the engineering and construction division of this major Northeast utility. He also performed a review of contract documents and bid documents. Mr. Ramirez presented the findings and recommendations for improvement, including suggested alternative contract provisions, and recommended project procedures.

Cochrane Woodwaste Cogeneration Project, Toronto, Canada

On behalf of the owner, Mr. Ramirez evaluated liability and damages resulting from a design-build contractor at a 10MW wood-fired cogeneration plant. He assisted the Owner in resolving issues with the surety.

Wheelabrator Falls Township Project, Falls Township, PA

Mr. Ramirez assisted with the preparation of a delay and lost productivity claim on behalf of the insulation subcontractor on this recycling and energy recovery facility.

Ravenswood Power Plant, Queens, NY

Mr. Ramirez assisted with the preparation of a delay and lost productivity claim on behalf of the insulation subcontractor during a plant retrofit at this 1700MW power plant.

U.S. Department of Energy (DOE), External Independent Review, Mounds Project, Miamisburg, OH

Mr. Ramirez was Hill's Project Manager, as a subcontractor to the U.S. Department of Energy (DOE), for performing congressionally mandated external Independent Reviews of active DOE Environmental Management projects. This review included the analysis of the \$360 million baseline budget, schedule, performance plan, and mission of the 306-acre former nuclear weapons plant.

U.S. DOE, Office of Contract Reform and Privatization, Contract Transition Analysis, Various Locations

Mr. Ramirez participated in a DOE analysis of contract transition practices and procedures to develop lessons learned and process improvements for major contract turnovers at DOE sites. Studies were conducted at several DOE facilities, including: Oak Ridge, Hanford, Nevada Test Site, Rocky Flats, National Renewable Energy Laboratory, and Brookhaven National Laboratory.

U.S. DOE, Tank Waste Remediation Project, River Protection Project, Hanford, WA

Mr. Ramirez provided consulting services and participated as a member of the DOE contract negotiation team for the DOE Office of River Protection's (ORP) \$6.9 billion River Protection Project (formerly known as Tank Waste Remediation Project). ORP will process 54 million gallons of highly radioactive nuclear weapon waste being stored at Hanford into glass logs for long-term burial. Mr. Ramirez has also participated in Expert Review panels for the DOE ORP, providing expertise to strengthen the DOE decision processes and project management practices.

Claremont Polychemical Superfund Site, Old Bethpage, NY

Mr. Ramirez led a team to investigate changes, delays, and cost overruns for the remediation contractor,

Radian, at this 9.6 acre hazardous waste site.

Pfohl Brothers Landfill Site, Superfund Remediation, Buffalo, NY

On behalf of the remediation contractor, OHM, Mr. Ramirez assisted with lost productivity analyses arising from differing site conditions and changes on this unit price remediation contract. The 120-acre site included over 4,700 drums of contaminated solid and liquid wastes.

Syncon Resins Superfund Remediation Site, NJ

On behalf of the remediation contractor, OHM, Mr. Ramirez prepared a delay, disruption, and cost overrun analysis for this 15-acre hazardous waste remediation facility on the Passaic and Hackensack Rivers.

RCRA Landfill Facility, General Motors Inland Fischer Guide, Flint, MI

Mr. Ramirez prepared an analysis of changes, delays, and cost overruns for the design-build contractor, OHM, who was providing services on a RCRA landfill, and soil excavation and stabilization project. The project involved differing site conditions, schedule delays, design changes, and construction management issues. Mr. Ramirez presented for mediation.

Hazard Waste Construction Consultant Project, Florida Dept. of Environmental Protection (FDEP)

Mr. Ramirez was Hill's Project Manager, providing FDEP with services during the design and bid phases of hazardous waste cleanup projects. This included the development of the standard forms of contract, and bid and specification documents.

Camden County Municipal Utilities Authority (CCMUA), Camden County Wastewater Treatment Plant, Camden, NJ

On a 38 MGD wastewater treatment plant expansion project, Mr. Ramirez assisted with the review of a contractor's claim for schedule delay and acceleration.

Papermill Wastewater Treatment Plant, Sitka, Alaska

On behalf of the developer of an innovative technology papermill anaerobic wastewater treatment plant, Mr. Ramirez examined construction defects, design errors and omissions, construction supervision issues, and delays.

Mercer County Regional Sludge Management Facility, Mercer County Improvement Authority, NJ

On behalf of the owner, Mercer County, New Jersey, Mr. Ramirez assisted with an analysis of design errors and omissions, delays, construction management issues, construction defects, and contractor termination for this innovative technology, 120 MTPD sludge management facility.

Ben T. Bootorabi

Director of Project Controls

Ben T. Bootorabi has over 27 years of construction management experience working on transportation projects as a project controls manager, claims specialist, project coordinator and troubleshooter, project controls engineer, and project engineer. Mr. Bootorabi's projects include subways, light rail transit systems, project management oversight for the Federal Transit Administration, highways and infrastructure, airports, marine and port facilities, and water treatment plants, from conceptual design to construction and operation stages. His experience includes various contract types including design-built, design-bid-built, CM @ risk, design development and consultant.

Mr. Bootorabi's major capital projects include the Los Angeles County Metropolitan Transportation Authority Metro Rail Red Line, The Minneapolis Hiawatha Light Rail, the Miami International Airport, Miami World Gateway American Airlines North Terminal project, the Port of Los Angeles Cabrillo Beach project, and The Los Angeles International Airport expansion. As a scheduler and cost control engineer, he was responsible for developing and monitoring detail and master schedules, providing project status briefings to program management, preparing monthly reports, managing change and claims processes; cost and schedule reconciliation during close-out, and coordinating submittals, requests for information, and requests for changes.

Mr. Bootorabi's expertise also includes work as a claims analyst and negotiator. His claims and claims prevention projects including tunneling and underground stations, water treatment facilities, airport terminal construction, and high-rise buildings. He has avoided and resolved potential claims at early stages of development through early detection, without involvement from the attorneys.

As a member of the contract closeout team on his projects, Mr. Bootorabi provided detailed merit and schedule analyses and assistance to estimators in order to establish allowable and disallowable cost including direct, indirect, and overhead cost claims. The major claims mitigation and analysis projects he performed include three tunnel contracts, six station contracts, a rail installation, and several other system contracts.

Mr. Bootorabi's specialized computer software skills include *Primavera P3*, *Sure Trak*, and *Microsoft Project*.

91st Avenue Wastewater Treatment Plant Expansion, City of Phoenix, Water Services Department, Phoenix, AZ

Mr. Bootorabi served as Project Controls and Claims Engineer Specialist. After



Education:
B.S., Civil Engineering,
University of
Mississippi, 1980

Registrations:
Engineer-In-Training,
California

the project experienced many major claims filed by the general contractor and their subcontractors, with claim values ranging from \$10-\$18M including pre-construction and construction delays, Mr. Bootorabi resolved all open items and identified new delay items. He supported the team in claims preparation and negotiations; compiled lists of issues to be addressed by the project team; developed a standard method for preparing time impact analysis for time extension requests; developed a claim management schedule, plan, and procedure; and demonstrated relevant issues in a simple, clear, and concise format.

Water Treatment Plant Projects, Los Angeles Department of Water and Power, Encina and Terminal Island, CA

As Scheduling Engineer, Mr. Bootorabi was responsible for critical path method scheduling and analysis, updating the network and reports in support of the field staff, schedule analysis, and coordination of changes and problems with the resident engineer. He reconstructed the actual events (as-built schedule), impacting the progress of the project. In addition, he utilized McDonnell Douglas' Scheduling Control System on a mainframe computer to update the schedule.

Dennis M. O'Connor

Director of Program Development

Dennis M. O'Connor has more than 35 years of experience with private- and government sector programs, specializing in the areas of business plans, acquisitions, cost benefit analysis, capital development, financial strategies, and public involvement. For the past 15 years, he was responsible for program development of over \$3 billion in projects.

Mr. O'Connor's clients have included Transportation Corridor Agencies (TCA) of Orange County, California, City of Los Angeles, the County of Los Angeles, the Ports of Los Angeles and Long Beach, the Metropolitan Transportation Authority (LA Metro), Los Angeles World Airports (LAWA), Caltrans, the US General Service Administration (GSA), and the US Army Corps of Engineers (USACE).

Mr. O'Connor is intimately familiar with Orange County's political landscape and has served in leadership positions for a number of business organizations there. He has a strong financial background, having served as Group Controller for a Fortune 500 company. He also served as one of the principals for the development of the SR91 Toll Road, one of the first public-private partnership transportation projects in California. He recently served as project principal for the Riverside County Integrated Program, which linked elements of environment, housing and transportation. City of Los Angeles Department of Water and Power, Los Angeles, CA, Project Manager. Mr. O'Connor is responsible for providing owners representative services for the Agencies commitment to achieve Renewable Energy Goals. His services include feasibility analysis, acquisition, environmental, engineering, construction management and commissioning. He is involved in the following projects solar facilities, wind farms, geothermal, and all other forms of renewables.

Riverside County Integrated Project (RCIP), CA

As Project Principal, Mr. O'Connor reviewed performance and management issues, and developed strategies to secure federal funding. As part of the program management team for integration of land use, transportation, and conservation planning for Riverside County, California, the RCIP became a model adopted across the country for streamlining the environmental process while providing for long-term development and economic growth.

Metropolitan Transportation Authority (Metro), Pasadena Metro Blue (Light Rail) Line, CA

As Project Principal, Mr. O'Connor reviewed performance issues and maintained interface on community-based issues for this \$800 million project. He was also involved in a series of staff, community, and executive meetings

Education:

A.A., Pharmacy, South Suburban College, 1964

Professional Memberships:

National Management Association
Planning Executives Institute
Society of Military Professionals
Business Association of Orange County
Executive Council of San Gabriel Valley
Industrial League
Credit Union
National League of Cities
National Association of Accountants
American Public Works Association
American Public Transit Association-
Capital Programs
Economic Scholarship Committee (ILOC)
Municipal Finance Offices Association

Publications:

"Planned Program Budget for Municipalities,"
Municipal Finance Officers Association

"The Advantage of Regional Transportation," Illinois General Assembly

"Privatization and Its Impact to Our Transportation System,"
International Right-of-Way Association

"Public/Private Partnership in Infrastructure," Reason Foundation Privatization Center Conference

"The Pacific Rim Challenge," Economic Issues Conference, University of California, Fullerton

to develop the project, designed to relieve aging and congested freeways, by extending the Metro Blue Line light rail system 13.6 miles from downtown Los Angeles to Pasadena.

Bay Area Rapid Transit (BART) System-Wide Renovation Program, San Francisco, CA

As Project Principal, Mr. O'Connor oversaw construction management services and efforts, reviewed performance issues, and provided human resource support. He also assessed technical staffing for this project to provide construction management support services to BART staff, including field engineering and project controls on an on-call basis.

Metropolitan Transportation Authority (Metro) Red Line Subway--North Hollywood Extension, CA

As Project Principal, Mr. O'Connor advised and developed strategies to handle board and public issues on this environmentally sensitive \$1.3 billion twin tunnel extension with three stations. He reviewed the project for performance and human resource issues to make sure the extension was progressing on time and within budget.

State of California CRSS State Road (SR) 91 Turnkey Toll Development

As the former Vice President of the California Private Transportation Corporation, a wholly-owned subsidiary of CRSS Inc., and the developer of this toll road, Mr. O'Connor was Project Principal responsible for political and community-based activities required for successful development of the Assembly Bill 680 turnkey toll development project, consisting of interchanges, widening, and aligning a 10-mile section of SR 91. This public-private partnership between the State of California and CRSS spanned Orange County and Riverside County, requiring interface with the Orange County Transportation Authority (OCTA) and the Riverside County Transportation Commission (RCTC) to obtain permitting, approvals, and public acceptance.

City of Los Angeles Housing Authority Urban Renewal Program, CA

As Project Manager, Mr. O'Connor led a team of experts that reviewed all public housing available in the City of Los Angeles, then developed strategies and urban plans to improve the individual units and create more positive development in and around the communities. This required significant interface with the communities as well as external influences impacting the housing including transportation, demographics, business and environmental issues. Mr. O'Connor produced a report after analyzing all these issues and offered recommendations for improvement strategies.

"Developing the School of Tomorrow," Industrial Education Magazine

"Putting Your Best Food Forward," Business Development Association of Orange County

"Marketing Your Company," City of Los Angeles Department of Public Works Seminars:

"Mobility in the 21st Century," (1991)

"Education Design/ Construction and Financing Seminar," (1987)

"Balancing Budgets Without Raising Taxes: The Future of Privatization in Orange County"

James N. Oswell, Jr.

Chief Estimator

James N. Oswell, Jr. has over 40 years of experience in the construction industry as a cost estimator and cost analyst. In addition to cost estimating, Mr. Oswell's career has focused on scheduling, project management, value engineering, claims resolution, and change order request processing for a wide range of projects, including heavy civil, petrochemical, concrete, and general building construction. He specializes in escalation forecasting services for large construction programs, including those for the Port of Seattle, U.S. Army Corps of Engineers, Naval Facilities Engineering Command (NAVFAC), and the office of the Architect of the Capitol, Washington, DC, as well as other state, federal, and local agencies. Mr. Oswell has extensive experience in the development and reconciliation of design phase estimates for airport, commercial, and institutional projects, and he has established standards for designer-provided, third-party estimates.

Mr. Oswell has field experience with masonry, carpentry, concrete (formwork and finish), earthwork, foundations and bridge construction, metal stud framing, drywall, acoustic ceilings, interior finishes, piping and plumbing, and civil electrical projects. He is skilled at developing and maintaining current cost databases for specific geographical areas, as well as working with industry cost databases. In addition, he has experience supervising the review of contractor progress schedules and pay applications. Mr. Oswell's specialized computer skills include Success Estimating, Primavera P3, SureTrak, Key CAD, and Visual Basic for Applications.

Dechlorination Facility, City of Los Angeles, CA

As Construction Supervisor/Estimator, Mr. Oswell provided construction supervision and cost estimating for the concrete construction associated with a new dechlorination facility.

SACC "A Furnace Rehab Petrochemical Construction, Exxon Chemical, Baton Rouge, LA

As Project Controller, Mr. Oswell prepared and maintained the schedule for a \$10.3 million project that was completed in 50 days. He assisted in the management of a crew of 700 men working 24 hours per day and negotiated over \$3 million in change orders.

Fertrin Foster Wheeler Furnace Reconstruction, Trinidad & Tobago, West Indies

As Project Controller, Mr. Oswell prepared and maintained a 1,450 activity schedule for an \$8.5 million project that was completed in 21 days. He assisted in the management of a crew of 500 men working 24 hours per day.



Education:

Coursework, California State University, Long Beach, 1976-1986
Coursework, El Camino College, 1969-1973

He negotiated over \$1.2 million in change orders, and maintained a welding log on 4,800 individual welds.

Irvine Pumping Station, BFI, Irvine, CA

Mr. Oswell served as Project Manager and Chief Estimator for the \$2.8 million installation of a 3,500 linear foot, 20 inch force main and pump station.

Target Stores Warehouse, Rancho Cucamonga, CA

As Project Manager for this \$4.8 million project, Mr. Oswell estimated and managed the installation of 320 caissons and caisson caps, 757,000 SF of slab-on-grade, and 100 loading docks.

Chino Hills Underground Storage Tank, Chino, California, BFI, Project Manager and Chief Estimator.

Mr. Oswell served as Project Manager and Chief Estimator for the \$3.8 million installation of a 1.5 million gallon water reservoir.

Palmdale Water treatment Plant, BFI, Palmdale, CA

Mr. Oswell served as Chief Estimator for a \$5.2 million new district water treatment plant.

Upland Water Storage Pond, BFI, Upland, CA

As Project Manager and Chief Estimator, Mr. Oswell was responsible for the \$2.2 million installation of an 800,000 gallon water reservoir.

La Cienega Airdrome to David, Griffith, Beverly Hills, CA

Mr. Oswell served as Estimator and Assistant Superintendent for the \$13.2 million installation of six miles of water main, including reconnection of 350 water services. The project included the reconstruction of three miles of roadway in three phases. La Cienega is one of the busiest surface streets in Los Angeles County with a traffic count in excess of 85,000 cars per day.

Palmdale – Lancaster Force Main and Pump Station, BFI, Palmdale, CA

For this \$4.2 million project, Mr. Oswell served as Chief Estimator and Assistant Project Manager for the installation of 18,000 linear feet of 30 inch force main and the construction of a district pump station with a dual-fuel 750KW emergency generator.

John R. Riley, PE

Executive Consultant

John R. Riley, a Professional Engineer, has over 45 years of experience in power plant planning, marketing, project management, detailed design, and construction management. Mr. Riley's project experience includes feasibility and planning studies, plant life extension and other plant improvement programs, design, start-up, and construction management services for steam, combustion turbine, and combined cycle electric generating facilities. These projects have also involved Independent Power Project development and joint ventures with construction companies and major equipment suppliers or others in domestic and international projects. Mr. Riley has also been involved in various management positions for EPC performance of CCGT projects.

In support of these projects, and in support of other client programs, Mr. Riley has testified before several state public service commissions. He has also testified in several state and federal courts, mediation or arbitration hearings, and has been qualified as an expert witness in federal court.

Various EPC Contract Evaluation Projects, J. Riley Consulting, LLC, Consulting Engineer

Over the last six years, Mr. Riley has been involved in several management positions regarding EPC construction of electric generating facilities. He served as joint venture coordinator for the construction contractor on three 500 MW CCGT projects in various areas of the United States. This coordination role involved project schedule monitoring, contract cost control, construction staff monitoring, and engineering reviews, as well as review of the original EPC contract from the contractor's viewpoint.

His most recent assignment included monitoring the EPC construction of a 400 MW coal-fired unit being added to an existing two-unit site in Arizona. The work began eight years ago with a technical and scope review, review of contract terms, overall contract evaluation, and contract cost. He participated in the development of all project coordination documents between the client and the owner/operator of the existing units who will also serve as program manager and operator of the new unit. Construction began in October, 1993 and the unit was declared ready for operation in July 2006. Mr. Riley functioned in a construction monitoring role reviewing progress, any potential change orders, and monthly contract invoices from the contractor. He certified the accuracy of the invoice for the client and the equity lender for the project lease. He consulted with the client's general manager and reported monthly at the client's board of directors meeting.



Education:
B.S., Mechanical
Engineering, University
of Kansas, 1964

Registrations:
Professional
Engineer, Kansas

**Professional
Memberships:**
National Society of
Professional Engineers
American Society of
Mechanical Engineers
Kansas Society of
Professional Engineers

Mr. Riley is also currently involved in the engineering feasibility and siting studies for another coal-fired project of 2,000 MW, with an initial development of 700 MW. This development will probably involve an EPC contract, and also involves the assessment of 2X600 MW units on an existing site. This unit is also proposed to involve EPC construction. Mr. Riley is currently assisting in the permitting of this project, which is now proposed as a single 850 MW unit.

Mr. Riley provided due diligence review services to the minority owners of a 2x650 MW project that is currently under construction with the EPC contract. He reviewed the contract and other permit and financing issues.

Mr. Riley is currently providing construction review services to minority owners on an 850 MW project.

Various Projects, Major Consulting Engineering Firm

Mr. Riley served as project manager, project mechanical design engineer, and mechanical engineer for numerous new generating stations and add-on units on existing sites, as well as plant upgrade and improvements. Among these projects is a 3X570 MW station, which is among the lowest cost energy producing stations in the United States. This project, as well as others included sale-leaseback arrangements and municipal bond sales to support the project financing.

Various Projects, Power Plant Improvements Program

As Director, Mr. Riley provided overall administration in the study, design, and construction phase services of the company's projects in fossil-fired plant improvement. As Director of the Capital Cost Group, he coordinated and reviewed capital cost estimates for power facilities. These projects involved all parameters that affected the cost of construction and operation of these facilities. His experience in these areas involved over 200 major projects.

Various Projects, Feasibility Studies, Project Manager.

Early in his career, Mr. Riley was involved with and directed feasibility studies for new generating stations and add-on units for several existing stations, resulting in numerous units with a total capacity addition exceeding 4,000 MW.

Various Nuclear Projects, Major Power Corporation, Nuclear Design Engineer.

As Nuclear Design Engineer, Mr. Riley was responsible for various nuclear safety systems for a 2X1050 MW station. He was also responsible for the preparation and amendment of the Preliminary Safety Analysis Report (PSAR) for the project.

Mr. Riley's experience in nuclear power generation also involves consulting services to a minority owners group participating in the Washington Public Power Supply System's WNP units, and to a minority owner of the Black Wolf project in Oklahoma.

Michael B. Smith

Senior Vice President

Michael B. Smith has more than 27 years of experience in the area of project management for engineering and construction projects. He possesses a strong background in project controls, which includes project planning, cost control, estimating, scheduling, forecasting, and claims and modification impact analysis for public and private projects.

As Senior Vice President and Southwest Regional Manager, Mr. Smith is responsible for business devolvement and operations. His duties include the oversight and management of the resources, ensures procedures are followed, maintains a high quality of services, and ensures that client satisfaction is maintained. The region is responsible for program and construction management projects with both public and private clients. Projects include a variety of infrastructure, such as transit (rail, airport, port, road and bridge, bus, and tunnel), water facilities, education (universities, colleges, K-12 schools), libraries, hospitals, government (DOE, DOD, COE), correctional facilities, environmental remediation, and industrial.

Process and Project Management Support, U.S. Department of Energy (DOE) Projects, Grand Junction, CO

Mr. Smith's responsibilities as an Operations Manager sub-consultant on this \$100M DOE contract, included management and supervision of his firm's department system review, development, and design in accordance with DOE Orders 4700.1 and 430.1. He was responsible for preparation of fiscal year budgets, maintaining policies and procedures, monthly financial status reporting, and oversight of task order modification process. Mr. Smith was also responsible for profit/loss, and business development for his firm's Grand Junction office.

Engineering Projects, U.S. Department of Defense (DOD), Otis Air Force Base, Cape Cod, MA

Mr. Smith was Poject Controls Manager for the Air Force Center for Environmental Excellence (AFCEE) Remediation & Construction (RAC) Program. This \$300M program for the DOD included the engineering and construction of two major extraction/re-injection water treatment facilities, various plume investigations, installation of alternate sources of drinking water to private residents, and a thermal soil treatment program. Mr. Smith was a member of the senior management team, which mobilized the Jacobs site office at Otis Air Force Base in Massachusetts. He was responsible for developing, training, and implementing standard operating procedures; developing and maintaining internal and external performance reporting requirements; and proposing and implementing a change control system.



Education:
Certificate, Management Practice for Engineering/ Technical Professionals, University of California Extension, 1991

Professional Memberships:
Construction Management Association of America (CMAA)

Primavera Users Group of Southern California

Support Sky Harbor Coalition, Phoenix, Arizona

Friends of Transit, Phoenix, Arizona

Project Management Institute (PMI)

Association of Advancement of Cost Engineering (AACE)

Women's Transportation Seminar (WTS)

Industrial Hazardous Waste Disposal Projects, Irvine, CA

As Regional Controls Manager, Commercial and Government Environmental Remediation, Mr. Smith was involved in a wide variety of commercial and government environmental projects ranging in value from \$5 to \$250M. He supervised the development and maintenance of project controls including estimating, analyzing earned value cost and schedule performance, analyzing CPM logic diagrams, and assessing modification/change impact. He was also responsible for developing, training, and implementing standard operating procedures for project controls throughout the region. Mr. Smith spearheaded the design and implementation of a company standard Project Status Report (PSR), which became the primary document used during project performance reviews. The PSR reduced project manager preparation time in half, and produced cumulative cost information that was more accurate than previous methods.

Engineering Projects, U.S. Department of Defense, Navy Southwest Division, CA

As Project Controls Manager, Comprehensive Long-Term Environmental Action Navy Program, Mr. Smith was involved in a wide variety of environmental construction projects including the \$260M, multi-site task order contract for the U.S. Department of Defense (DOD), Navy Southwest Division CLEAN program. He was responsible for coordinating the project controls effort with two teaming partners. His tasks included overseeing the development and maintenance of project controls including estimating, analyzing earned value cost and schedule performance, assessing modification/change impact, and negotiating cost and schedule with clients. Mr. Smith also developed, trained, and implemented standard operating procedures for the Pasadena Operations.

Projects in the Southwest Region include:

- City of Phoenix, Sky Harbor International Airport Technology Program Manager, Phoenix, AZ
- City of Phoenix, Sky Harbor Intl. Airport Community Noise Reduction Program, Phoenix, AZ
- Valley Metro Central Phoenix/ East Valley Light Rail Transit System – various Line Segments and Light Rail Vehicle Storage & Maintenance Facility, Phoenix, AZ
- Tucson International Airport Concourse Expansion Planning & Design, Tucson, AZ
- EarthTech – Scheduling & Claims Consulting, Phoenix, AZ
- MnDOT Hiawatha Light Rail Line Construction Planning & Scheduling, Minneapolis, MN
- OCTA CenterLine Light Rail Preliminary Engineering Program Management Consultant Team, Orange County, CA
- Miami World Gateway American Airlines Terminal – Claims Consulting, Miami, FL
- Port of Long Beach Pier T Marine Terminal Upland Demolition & Hazardous Materials Abatement, Long Beach, CA
- State of California Santa Ana Civic Center Plaza Office Building Seismic Upgrade, Santa Ana, CA
- Southern California Metropolitan Water District Inland Feeder Arrowhead Tunnels Project, San Bernardino, CA
- Los Angeles MTA Metro Rail Red Line, Los Angeles, CA
- Southern California Edison CIP Support--Scheduling, Cost Control, Risk Management, and Claims

Robert M. Morse

Executive Consultant

Robert M. “Bob” Morse has more than 50 years of broadly diverse worldwide experience in the electric power industry. His background includes extensive executive management, development, construction and operations management experience in nuclear, hydro and fossil projects for electric utilities and independent power producers, process and petrochemical clientele both domestically and internationally.

Mr. Morse’s recent power project experience includes participation in various capacities in the following projects while with UniSource Energy, Hill International, Bechtel, and his own firms, Robert Morse Associates & International Power Partners. He has worked on the development and implementation of renewable electrical energy projects including large and small hydro, geothermal direct steam and binary cycle, landfill gas, biogas digester, wind, solar and interconnecting transmission and distribution lines.

A few representative projects are:

- Mammoth Pool Hydro 100 MW
- Salt River Hydro & Pumped Storage
- Devil’s Canyon Hydro
- Baca Geothermal 50MW
- Dixie Valley Geothermal Project 50MW & 220KV transmission line
- Mammoth Geothermal Project 30MW
- Honey Lake Geothermal
- Coyote Canyon Landfill Gas 20MW
- Spadra Gas to Energy Project 10MW
- Zond Skywind Wind and Transmission Line 240MW
- Springerville AZ Photovoltaic Solar Project
- Honey Lake Solar (development only)
- Cairo Interconnection Project 220KV and 50 KV distribution

Hill International, Executive Consultant

Mr. Morse provides project management, project oversight, development, EPC, construction progress audit, troubled project turnaround and expert witness for large power facilities.

Honey Lake Power Partners, Susanville, CA/NV

Mr. Morse is a partner and lead developer in this renewable energy center for IGCC, geothermal, wind and solar energy. He provides consulting services to the developer of this power plant site including land use planning, siting, permitting, financing, right-of-way, power transmission line egress, interconnection to utility grid, EPC contracting, and operations and maintenance. He has been involved in this site/project since 1993.



Education:

B.S., Business Administration, University of Southern California, 1961
A.A., Engineering, Pasadena City College, 1958

Awards/Honors:

Archimedes Circle (University of Southern California)

Ebasco Services, Inc. and Ebasco Services International, Inc., President/Director

He was responsible for the development, design and construction of independent power projects totaling \$400 million annually in the 16-state western region. He was Chairman of E & L Technologies, a process and petrochemical engineer-constructor. He was also responsible for overseeing nuclear and fossil fuel power projects, initiating strategic alliances and joint ventures and working with international financial institutions. He managed a 600-person joint-venture company in the Republic of China and served as Director of the US/ROC Economic Council.

Bechtel Power Corporation, Manager of International Operations

For more than 20 years, Mr. Morse was responsible for performing engineering, procurement and construction contracts for electric power projects internationally. He formed and directed joint venture and subsidiary companies; negotiated and worked directly with foreign clients and governments; and implemented projects and managed project executives. Prior to that, he was a Captain, Commanding Officer of a U.S. Marine Corps Engineering and Construction Company and is a Vietnam Era Veteran. Mr. Morse is a Life Member of The Beavers, a construction fraternity.

- Springerville Expansion Project, UniSource Energy/Tucson Electric Power Company
- Luna Energy Facility, UNS/PMN/PhelpsDodge
- U.S. Department of Energy – Hanford Nuclear Reservation, Nuclear Waste Treatment Facility
- University of California San Francisco Cogen Project
- Springerville Expansion Project, AZ, UniSource Energy Corp.
- Quetta Power Plant, Quetta, Pakistan, Fiat Avio SpA
- Paiton Power Station Units 7 & 8, Java, Indonesia, PT. Paiton Energy
- Ozone Plant (Wastewater Treatment) Shasta Electric Company, Las Vegas, NV
- Stockton Regional Wastewater Treatment Control Facility Stage Expansion Program, Stockton Municipal Utility Department
- Vail Power Station, UniSource Energy/Tucson Electric Power Company
- Huntington Beach Steam Station
- Penuelas Power Station
- DeMoss Petrie Power Station, UniSource Energy/Tucson Electric Power Company
- Dabhol Power Project, State of Maharashtra, India, Enron Corporation
- Changsha, 50 MW Cogen CFB CoalChina, Nations Energy
- Lingshi, 2 x 25 MW CFB Waste CoalChina, Nations Energy
- Panda Energy Corporation, Entergy/Allstate/Morgan
- Stanley MANDYA, 164 MW Naphtha GFCCIndia, India Power Partners
- ADANA, 100 MW HydroTurkey, India Power Partners
- AFSIN A&B, 2250 MW CoalTurkey, India Power Partners
- Samar, 75 MW CFB CoalPhilippines, Nations Energy
- SIPCO, 450 MW CC Cogen projectCaptiveThailand, Nations Energy
- Tamil Nadu C.C., 4 x 225 MW Combined Cycle ProjectsIndia, Nations Energy

Robert A. Zanetti

Project Manager

Robert A. Zanetti has over 40 years of extensive experience in project development, engineering, marketing, project execution and startup for various types of power plants including 2MW to 500MW cogeneration plants, extensive involvement in nuclear power plant design, construction, and modification, as well as a variety of fossil and combined cycle power plants. Clients have included electric utilities, independent power and co-generation CHP developers, process and pharmaceutical plants and transportation projects worldwide. His 40 years of experience includes six years as Vice President of Construction for Enron Engineering and Construction Company and 34 years at Stone & Webster Engineering Corporation with the final 14 years as Vice President and Director. Since joining Hill International, Mr. Zanetti's projects include:

Shell Canada Oil Sands Upgrader Project, Edmonton, Canada

Mr. Zanetti provided expert advice relating to the construction of a 150MW cogeneration plant at the Shell Canada Refinery in Edmonton, Canada. The plant is highly integrated into the process, which upgrades oil sand emulsion into a feedstock for the Shell Refinery at the site. There is potential litigation with the owner due to cost overruns of the original budget on the project. The owner has charged cost increases due to Shell conservatism and failure to manage construction effectively. Mr. Zanetti evaluated of the design by Bantrel, (Bechtel Canada), appraised the effectiveness of the construction process by Bantrel, and may provide future expert testimony in arbitration or court.

Dresden Power Plant, Dresden, OH

The project involved a dispute between the construction company and the energy company relative to the construction quantities on a 7FA combined cycle power plant in Dresden, Ohio. The construction company signed a contract containing estimated quantities with the proviso that the quantities would be adjusted when engineering was complete. Mr. Zanetti provided quantification of the project quantities at the time of contract and at the completion of engineering. He provided an expert report proving that the quantities not only had substantially increased, but also significantly exceeded the amounts of quantities normally needed to construct a 7FA combined cycle power plant.

Guayama Carbon Thermoelectric Plant, JR Insulation, Guayama, Puerto Rico

JR Insulation, part of a consortium, was contracted to install insulation on this unique type of power plant. A dispute arose between the engineer and



Education:

Northeastern University,
B.S., Mechanical
Engineering, 1960
Graduate Coursework,
Engineering, 1964-65
Certificate,
Management
Development
Program, 1976
Diploma, U.S. Army
Engineering School, 1960

Registrations:

Professional Engineer:
NJ, MA, PA, FL, MI, CA

Professional Memberships:

Fellow of the
American Society of
Mechanical Engineers

Awards/Honors:

Pi Tau Sigma
Mechanical Engineering
Honorary Award

Publications:

"How to Size the
Gas Turbine for Co-
generation Plant
Applications,"
(ASIA Gas Turbines
Conference, 1996)

"Design Considerations
of Large/Medium/
Small Gas Turbine
Power Plants,"
(ASIA Gas Turbines
Conference, 1995)

supplier of the insulation and JR Insulation concerning the cost of manpower and extra insulation needed due to the extended schedule. Hill was retained to provide quantity and manpower allocation studies and to produce an expert reporting supporting the additional costs incurred by JR Insulation, now in bankruptcy. Depositions are pending on the project.

Cosumnes Power Project, SMUD, CA

The project involved a lump sum construction contract to build a 2x1 7FA power plant with a 19-month construction schedule. A dispute arose between Fru-Con Construction Company and SMUD, and SMUD terminated Fru-Con after 18 months of construction activity and a projected completion date of 6 months in the future. Mr. Zanetti serves as an expert witness for the project and is responsible for expert reports, expert rebuttal reports, and deposition testimony. The court case is scheduled for the middle of 2007.

River Mountain Pumped Storage Project, Granite Construction Company JV, Logan County, AK

The project is a 724MW pumped storage power project, which is owned by River Mountain Limited Partnership. Hill was retained by the JV to provide preliminary observations and assessments regarding the risks of performance and liquidated damage under an EPC contract in connection with the joint venture's expected construction of the project. Mr. Zanetti provided a review of the documents and interviews with Granite Company employees. He prepared a comprehensive risk analysis report for use as a guideline for assessing and managing the risks.

PSEG Power Continuing Service and PSEG Power Monitoring and Reporting Methods

After deregulation of the power industry, PSEG Power had several major capital projects underway which were not progressing in a satisfactory manner to achieve the projects' cost and schedule objectives. PSEG hired Hill International to assess its capital projects organizational structure, delivery systems and procedures, and personnel roles and responsibilities. Mr. Zanetti reviewed PSEG's project delivery system, including both internal support organizations and external consultants and suppliers, as well as schedule and cost adherence. Recommendations for future improvement were aimed at optimizing PSEG's project delivery performance in a deregulated, competitive environment. Projects included:

- Bergen Project – 550MW Power Plant, Bergen, New Jersey, \$319 million.
- Linden Project – 1220MW Power Plant, Linden, New Jersey, \$787 million; bids are now being solicited to convert the project to multiple lump sum contract.
- Bethlehem Energy Project (BEC) – 850MW Power Plant, Albany, New York, \$485 million.
- Mercer Project – Addition of Selective Catalytic Reduction Units on each 350MW coal fired unit, Mercer Generating Station, Trenton, New Jersey, \$109.5 million.
- Waterford Project – 850MW Power Plant, Waterford, Ohio, \$485 million.
- Lawrenceburg Project – 1190MW Power Plant, Lawrenceburg, Indiana, \$787 million.

Quetta Combined Cycle Power Plant, Fiat Avio

Mr. Zanetti provided consulting services on the analysis of turbine trips during reliability testing due to system anomalies. He analyzed turbine controls, system anomalies, and droop settings and analysis. He consulted with GE Engine Controls experts and provided an expert report.

Newington Energy, Consolidated Edison Company of New York, Inc (ConEd)

Mr. Zanetti provided executive oversight covering the construction of the Newington power Project in New Hampshire. The project is a 500MW nominal reheat 2x1 with GE7FAs and Foster Wheeler HRSGs. The work includes review of all monthly reports together with site walk downs and verbal analysis report to ConEd.

East River Repowering Project, Consolidated Edison Company of New York, Inc (ConEd)

Mr. Zanetti provided executive oversight covering the construction of the East River Repowering Project. The project consists of two GE7FA gas turbines and two Vogt/Nem HRSGs. The gas turbines generate approximately 325MW of power and the HRSGs generate steam for use in the ConEd steam supply system. Mr. Zanetti reviewed and commented on all specifications produced by the project managers and attended meetings. Hill provides project management oversight with monthly site visits to assess project status, attend project review meetings, and provides advise on contract change orders and schedule performance.

ENRON Engineering & Construction Company

As Vice President, Power, at Enron Engineering and Construction Company, Mr. Zanetti was responsible for execution and development projects in the Americas, Asia, China, Africa and the Middle East. For execution projects, his duties required execution of all major contracts, providing the management staff, cost estimates, projects schedules and the management of the projects to successful completion. For development projects, his duties required the development of management structures, site surveys, scopes of work, cost estimates, performance calculations, schedules, risk reports, EPC bids, and overall analysis of the viability of projects.

Stone & Webster Engineering Corporation

As Vice President and Director of Stone and Webster Engineering Corporation, Mr. Zanetti managed project development, engineering, marketing, project execution and start up of a variety of nuclear, fossil fired, combined cycle, and cogeneration power plants. Mr. Zanetti managed project activities amounting to over \$6 billion. He developed and implemented a procedure for documenting project financial management covering all phases from marketing to project completion, and is an expert in the management of large complex projects.

For 34 years Mr. Zanetti was involved with the design and construction of power plants, including the conceptual design, final design, construction, and modification of nuclear power plants as Assistant Chief Power Engineer, Manager of Conceptual Engineering Division, Manager of the Control Systems Division, and Vice President in Charge of a number of nuclear plant design, construction, and retrofit projects.

Thomas L. Woodworth

VP of Management Information Systems

Thomas L. Woodworth has more than 19 years of experience leading teams and managing multi-million dollar budgets maintaining mission-critical IT project schedules. His background includes provision of technology services and solutions, software development and implementation, information security expertise and distinguished military service leading and mentoring a 159-man Infantry Company during combat operations in support of Operation Iraq Freedom.

Mr. Woodworth led and sponsored a team of government and non-governmental technology specialists tasked to design and set up the first of a kind collaboration portal which enabled both parties on the Newport Chemical Depot project to share real-time information. After nine months of design, policy change, approval and implementations, the portal was successfully deployed on time and under budget resulting in US Army Soldiers Biological and Chemical Command adopting this technology as the standard across all chemical demilitarization sites.

He also planned and set up cost reduction measures for EXi Parsons Telecom through results-driven management of vendors, clients and assets, providing EXi Parsons with immediate yearly savings of \$216K and increasing cash flow during a down market.

Parsons Information Systems, Newport Chemical Demilitarization Project, West Central Illinois, Information Systems Manager

Mr. Woodworth built and led an imbedded IS team responsible for representing the client in all IS activities of the multi-billion dollar Newport Chemical Depot project (bulk chemical storage and destruction facility operated by the US Army). Managing an annual budget of \$1.2 million and responsible for the leadership and development of three associates, Mr. Woodworth consistently met and exceeded expectations for budget and schedule. He was responsible for joint client/government strategic planning, design, and implementation of information systems, business solutions and processes for the projects. This included discovery phase, contract analysis, feasibility studies, technology implementation, and project initiation. Specifically, his duties included:

- Design, implementation and installation of all infrastructures both for the Government and for the Parsons Team totaling 300 workstations within a six-month time frame.
- Led a joint Government, Parsons and Parsons IS team that developed the IS Master Plan providing the vision and path for project information systems operations currently in existence.



Education:

B.S., Construction Management, Ferris State University, Michigan, 1992
A.A.S., Building Construction Technology, Ferris State University, Michigan, 1990

- Planned and projected Estimate at Completions requirements that laid the ground work for on-going IS operations support staffing and resources. As a result, Newport is considered to be a model project for all others to emulate.

Parsons Information Systems Projects, Technology Director--Parsons Construction Group

Mr. Woodworth was responsible for strategic and tactical deployment of Information Systems (IS) and User Services, direct IS consulting, business development support, and financial management of the Global Business Units (GBU). With an IS budget of \$2.4 million and project values between \$750,000-\$2 million, Mr. Woodworth's duties included strategic planning of the GBU IS future direction.

Parsons Information Systems, Business Solutions Manager

Mr. Woodworth was responsible for a team of IS managers across Parsons Business Units that planned and managed delivery of all IT solutions proposed and implemented on Parsons projects including voice, data, satellite, project management, control and engineering systems. His duties included consulting with the business development teams to address unique technology differentiators, form strategic relationships and help grow Parsons' business.

Parsons Information Systems, Technology Solutions Manager

Mr. Woodworth was the point person for all Information Systems proposals and project start-ups related to Parsons Commercial Group's Business Development Team and Senior Leaders. Approximately half of Mr. Woodworth's time in this position was part of Operation Iraq Freedom II. Acting as Parsons Communication Group (PARCOMM) Technical Director, he was the PARCOMM Business Development Team's representative for all proposal work related to the implementation of information and business systems. He developed and managed expectations while mobilizing proper teams to deliver full suite of services in support of Parsons Honeywell field sites and Honeywell campus locations. He also monitored client satisfaction for initial project delivery.

Parsons Information Systems, EXi Parsons LLC, Information Systems Manager

Leading and managing Information Systems (IS) execution for EXi Parsons, Mr. Woodworth's responsibilities included design, development, implementation and use of the organization's IS infrastructure and service. Specifically, his duties included:

- Provided EXi Parsons with a world-class infrastructure supporting their domestic and international operations with six months of project start-up. The infrastructure included network, servers, e-mail, public branch exchange, firewall, intrusion detection, and world-wide remote connectivity.
- Enabled a new Telecom concurrent access to both Verizon and Ericsson corporate networks which allowed transparent access to all business systems and delivery management tools for EXi Parsons.
- Managed a \$900,000 annual budget with initial savings of \$216,000 within the first three months as Manager.
- Led the Parsons Account as the first user group to deploy WorldCom Dial-IP and Cisco's PIX Firewall technology; these two products were later adopted as Parsons' standards.

Vidya C. Dixit, CCE, PSP

Project Controls Director

Vidya C. Dixit, a Certified Cost Engineer and a Planning and Scheduling Professional, has more than 22 years of experience providing services for program, design and construction management. His background includes developing scopes of work, supervising design professionals, creating bid packages, estimating project costs, bidding projects, awarding contracts, managing change orders and delay claims, constructability reviews, feasibility studies, master planning, and value engineering. Utilizing strong analytical and problem solving skills, Mr. Dixit's expertise has saved school districts millions of dollars and he has provided guidance and sound advice on how to handle unqualified contractors, potential lawsuits, and other complicated issues.

Managing a team of schedulers, cost analysts, and project analysts, Mr. Dixit developed cost, budget, and a schedule control system based on Primavera P3 and Expedition. He is a resourceful, and results-oriented professional who managed projects from pre-design through project close out and has directed many construction teams to successfully complete a wide variety of school projects.

His specialized computer software skills include *Primavera P3, P3e/c, P5, Expedition, SureTrak, Prolog, Primaplan Investigator, Schedule Analyzer Pro, Claim Digger, Common Point 4D* and *Microsoft Photo Editor*. He has also trained cost schedule professionals on a variety of software programs including *Primavera, Prolog* and *Expedition*.

Southern California Edison (SCE), Rosemead, CA

Mr. Dixit is leading a team of five people to assist SCE in the development of a sound project control system to manage their \$2 billion capital improvement program including building transmission and substations in southern California. In addition to management of real estate and engineering, the project involves major transmission and substation equipment procurement. Mr. Dixit assists in the development of metrics to measure the performance of the overall program using earned value analysis and he effectively utilizes the program schedule to forecast the completion date. Mr. Dixit is also spearheading the process of estimating the cost and completion date using *Primavera Enterprise* and *Expedition* software.

Seismic Retrofit Program, Los Angeles Department of Public Works, Los Angeles, CA

Mr. Dixit was the project controls manager for the \$15M school board 1953 Seismic Retrofit Program. He reported directly to the program manager on

Education:

M.S., Mechanical Engineering, Drexel University, PA, 1988

Registrations:

Certified Cost Engineer
Planning and Scheduling Professional

Professional Memberships:

Southern California Primavera Users Group
Association for the Advancement of Cost Engineering International

Awards/Honors:

Educational Award, AACE Southern California, (2006)

Publications:

"4D Modeling Adding a New Dimension to Scheduling," AACE Cost Engineering Journal, (2007)

"Managing Construction Delays" presented to AACE Southern & South Central California, (2005)

Seminars:

Conducted training for LAUSD on "Planning and Scheduling"

issues that included cost, estimates, schedule, and document control. He developed a cost, budget, and a schedule control system based on *Primavera Expedition*, *Primavera P3*, and *Image Tool*. He supervised and coordinated schedulers, document control specialists, and cost control staff. Mr. Dixit prepared and monitored a comprehensive budget for all the hospitals, implemented a system for the review and processing of monthly payments, and ensured that any encumbrances were reflected in the cost report. He supervised, reviewed, and assisted in the preparation of the program master schedules submitted by architects, engineers, and contractors. He also reviewed and reconciled the cost estimates submitted by architects, engineers, and contractors. Mr. Dixit developed a 4-D model to link the project schedule to the 3-D geometry to analyze the impact of phasing and move management for each hospital. He assisted in the evaluation of bids, request for proposals, and change orders. He also prepared monthly reports to summarize project financial status, schedule performance, time extensions, and any potential revisions to the budget.

Silicon Wafer Manufacturing Facility, Hillsboro, OR

As Senior Project Scheduler, Mr. Dixit developed a master schedule for Intel's \$1B, 300mm silicon wafer manufacturing facility. He incorporated the subcontractor's schedule into the master schedule, updated it periodically, and continually tracked RFIs for potential changes that might impact costs and schedules. Additionally, he developed 'Schedule Tracker,' a software program that tracks any changes between two schedules.

Semiconductor Silicon Wafer Facility, Hillsboro, OR

As Senior Project Administrator, Mr. Dixit developed a master schedule for a \$350M semiconductor silicon wafer facility, incorporating the subcontractor's schedule into the master schedule and updating it periodically. He analyzed the critical path and project flow, and recommended corrective action to manage and mitigate any delays. He also conducted weekly meetings to discuss project progress, delays, and change orders.

Deepak Nanda

Mr. Nanda has 41 years of diversified experience responsibility in the utility industry. His experience covers licensing & regulatory, financial, management and operating aspects of alternative energy, fossil fuel and nuclear power plants and transmission and distribution systems. He has held several senior management positions in the above areas. His areas of strength include strategic planning, leadership, communication, operations management, quality management and process improvement. He has exhibited a proven track record of continuing success in a wide range of assignments.

Management Consultant

Providing management consulting services for licensing, planning, execution and bid preparation of large transmission and distribution projects to various clients.

Southern California Edison Company

Held various senior management positions with the Company during this period. Southern California Edison Company is one of the largest utility companies in the USA with a large residential, commercial and industrial customer base. Brief description of major assignments is shown below.

Director Project Management Organization

Responsible for the Project Management Organization that oversaw approximately \$500M - \$600M of annual construction expenditures in the transmission, distribution and substation field. Developed and implemented project management organization, procedures and policies, controls for successful management of projects of various sizes and complexities. Managed licensing efforts for large projects thru state and federal agencies.

Senior Vice President, Edison ESI and Director, Shop Services

As Sr. VP. of Edison ESI, was responsible for the P&L of Edison ESI, a wholly-owned subsidiary of Southern California Edison Company. The subsidiary marketed the utility company services to non-utility customers nationwide. Increased sales by 150% over a three-year period through systematic analysis of strength of utility services, market potential, customer needs, and aggressive marketing.

As director of Shop Services was responsible for annual budget of over \$60M and approximately 600 employees as Director of the Shop Services department. The department was responsible for providing maintenance and repair services for the utility and non-utility customer base of over 500 large entities. Reduced the cost of services by 35% over a three-period through reductions in overhead and productivity improvements.

Education:

Masters of Business Administration, University of Southern California, 1972 - 1976
Masters of Mechanical Engineering, University of California, Berkeley, 1967 - 1968
Bachelor of Engineering, India, 1963 - 1967

Registrations:

Engineering registration California

Manager, Electric Transportation

Played a key role in the emerging field of electric automobiles and other modes of electric transportation for Southern California Edison. Responsibilities included preparing utility infrastructure for supplying electricity to electric vehicles, interfacing with the state and federal regulatory agencies and officials, auto manufacturers, other utilities, and national organizations involved in this effort. Participated in the creation of a nonprofit consortium for the facilitation of converting defense and aerospace technologies for use in commercial markets in the area of electric vehicles.

Manager, Customer Projects

Responsibilities included managing projects to supply power to the large industrial, aerospace, high technology, and interconnect co-generators. Responsible for the entire project lifecycle including design, construction, permitting, and customer interface/negotiations. Managed annual budgets up to \$100M. Provided services for 100+ large customers over the four-year period.

Project Manager/ Project Engineer

Managed licensing, design, construction, and commissioning of new and upgrades of existing nuclear and non-nuclear power plants. Managed multiple projects ranging in size from \$250K to \$150M and up to 200 employees and contractors. Responsibilities included licensing, regulatory interface and execution of the projects.

Manager, Financial Controls

Responsible for financial planning and controls for multiple projects totaling to \$500M. Responsibilities included budgeting, cash flow analysis/projections, and financial reporting. Participated heavily in the development of project controls, philosophies, and protocols.

Engineer

Provided engineering support to fossil fuel and alternative energy power plant projects.

Catherine M. Spillars

Vice President

Catherine M. Spillars has over 25 years of marketing and sales experience, working for both program and construction management firms as well as high-tech industry leaders including Veritas, Compaq, Digital, and MicroPro. She possesses a solid marketing foundation and strong management skills gained through leading and managing teams at the field, district, regional, and corporate levels, as well as internationally. She works closely with staff to develop marketing and business plans incorporating clear strategic and tactical goals with specific deliverables and measurement criteria. In addition to building, motivating and grounding these teams, she also provides focus and mentors career development.

As Director of Marketing, Ms. Spillars' duties include directing the marketing activities of corporate and regional marketing coordinators, as well as responding to requests for information and assistance. She also interacts with colleagues regarding upcoming opportunities and proposal efforts; participates in sales and manager's meetings; and develops and manages corporate marketing plans and budgets. She oversees public relations and corporate image activities, including advertising campaigns, and represents the company at national trade shows and local professional organizations. She also manages the concept, design, and production of all corporate marketing collateral materials, manages newsletter production and is responsible for web site maintenance.

Ms. Spillars delivers professional marketing plans and programs that produce results and reflect solid management, including timely implementation, fiscal discipline, and accountability. The quality and professionalism of her work are frequently acknowledged, and she has received numerous awards for her performance. At Digital, she was nominated for the Babson College one-year Management Program, and upon completion, was invited to participate in their one-week follow-on Leadership Course. Her awards include Regional Marketing Awards, Western Region Sales Management Awards, Marketing Excellence Awards, Digital Team Awards, and Management Recognition Awards. Her specialized computer software skills include *Adobe Photoshop*, *Adobe InDesign* and *Microsoft Publisher*.

Veritas Software Corporation, Redmond, WA

As the Windows Alliance Business Development Manager, Ms. Spillars managed the Windows Initiative within five key Veritas accounts. Working with Alliance Managers, she produced Windows Business Development Plans for HP, Unisys, IBM, Compaq, and Dell. She also built a Windows team,



Education:
B.A., Home Economics,
California State University,
Long Beach, 1971

**Professional
Memberships:**
American Marketing
Association

identified strategies, objectives, and tactics, and established goals and requirements for the Windows Initiative. As the Compaq Account Manager, OEM Group, Ms. Spillars managed Compaq account sales for Veritas, achieving 105% of 2000 sales goal, including Veritas Club status. She directed the Veritas marketing team and leveraged Compaq resources, introducing programs that provided Awareness (Events, Training, and Brochures), Field Readiness and Demand Generation for Veritas and Compaq sales teams.

Compaq Computer Corporation, Bellevue, WA

As the West Region Marketing Manager of the Advanced Technologies Group (ATG), Ms. Spillars managed development and implementation of the ATG Marketing Plan, driving storage, workstations, nonstop, and networking sales. She managed plans and programs, including major Compaq events, @ A Glance Brochures, ATG web pages, competitive guides, and multi-city road shows for major initiatives. Ms. Spillars also managed several cross-functional teams, assembled to develop and deliver regional programs. She was acknowledged by storage and workstation vice presidents as providing the top programs for their respective divisions. She received the 1999 Regional Marketing Award. As West Region Marketing Manager of the Storage Group, Ms. Spillars produced the West Region Storage business and marketing plan, including the "Storage 6-Pack," six major programs that included training, promotions, and customer/partner events. She received the 1998 Western Region sales management award. As district marketing manager, Ms. Spillars managed the development and implementation of the Pacific Northwest marketing plan, including programs that addressed customer awareness, field readiness, and demand generation. Ms. Spillars achieved 1995 and 1997 DEC100 status.

Digital Equipment Corporation, Marlboro, MA

As Worldwide Marketing Manager, Ms. Spillars managed development and delivery of international electronics industry operations marketing programs, addressing key business initiatives in multiple markets. She created worldwide cross-functional teams, representing all business segments and geographies for development and implementation of international electronics programs, including events, training, direct mail, and major trade shows (DAC, DECworld). She volunteered her department to participate as the corporate market-for-results pilot. Ms. Spillars managed a direct staff of six, department staff of 12, and several cross-functional teams. She received Marketing Excellence Awards in 1990 and 1991, Digital Team Awards in 1991 and 1992, and a Management Recognition Award in 1993. Ms. Spillars was nominated by management to participate in Digital's one-year Babson College Management Program (1993). Upon completion, she was invited to participate in the follow-on one-week Leadership Course (1994).

Digital Equipment Corporation, Geneva, Switzerland

As European Marketing Manager, Ms. Spillars managed European-wide software programs for Digital's European Corporate Headquarters, Switzerland. She built and directed a successful team of 17 European Country software managers, and implemented programs that included promotions, training, and events. Additionally, she introduced European catalogues and established financial measurement resulting in 30% revenue growth over the previous year. Ms. Spillars managed participation in European and Worldwide Trade Shows (DECville, DECworld) and high-level executive events, including corporate leaders' forums, targeting major European accounts. She managed the implementation of European Marketing Promotions, product announcements, and training.

Elizabeth J. Zipf, LEED AP (BD+C)

Vice President

Elizabeth J. Zipf, LEED AP, has over 20 years of experience in marketing, communications, and business development management; long-term business planning; and materials and graphics production. Ms. Zipf has supervised the creation and production of business development and marketing materials, including proposals, qualifications, presentations, brochures, and SF 330s. She has also supervised the creation and production of such communications and public relations materials as press releases, award submissions, and articles.

Ms. Zipf has won numerous awards from for her achievements and excellence in business development and marketing. She is a member of the Society of Marketing Professional Services, Urban Land Institute Philadelphia, and volunteers with the Philadelphia Chapter of the American Institute of Architects on special projects.

VP, Proposals & Graphics America, Hill International, Inc.

Ms. Zipf is responsible for department budgeting; supervision of the entire marketing and business development department staff; and supervises the development, use, and maintenance of crucial databases, including client contacts, status of prospects, and sales and revenue reports.

She is accountable for the quality and consistency of marketing communications materials, identifying potential teaming partners for specific projects, researching industry trends and opportunities, developing long-term marketing strategies, and supporting senior principals in all of their business development efforts. This includes special projects; business development research; budget, design, writing, and production of trade show events; web site development; and direct mail campaigns.

Market & Business Development, KlingStubbins, Manager of Marketing & Business Development

KlingStubbins is an architectural and engineering design firm. For almost 20 years, Ms. Zipf managed all of the firm's marketing, communications, and business development initiatives and the staff for six offices. She worked closely with principals to develop yearly marketing and business development strategies and budgets and implemented and monitored plans. She also created strategic business development, marketing, public relations, and communications programs to produce referrals, build business and grow target accounts. She developed and managed a wide range of channel marketing initiative, including web site content, advertisement, collateral and multi-media production, trade shows, and client events.



Education:
Coursework, Rowan University, 1983-1984

Registrations:
LEED AP BD+C

Professional Memberships:
Society of Marketing Professional Services
Urban Land Institute

Awards/Honors:
Klingstubbins Presidential Award
Klingstubbins Vision Award
SMPS Philadelphia Rising Star Award
JDRF Golden Sneaker Award for Corporate Fundraising

Ms. Zipf's services also included research and reporting of leads, trends, indicators, and industries. She managed, developed, and performed quality assurance for proposals, brochures, presentations, website, and many other company wide marketing materials and graphics. She managed, coordinated, hired, and trained marketing staff firm wide ranging from 4 to 22. She provided development and quality control of the firm-wide graphics library, and developed and implemented five corporate branding initiatives. Ms. Zipf provided development, training, and maintenance management of the Deltek database. She research and maintained the department hardware and software. She also assisted in the development of and managed and executed the firm-wide Small Business Outreach Program.



Retail Overview

Select Projects

Project Name	Location
Al Ain Central Stores	Abu Dhabi, UAE
Al Bawabah Development	Al Khobar, Saudi Arabia
Bergstrom Air Force Base Exchange Store	Bergstrom, TX, USA
Beverly Center	Los Angeles, CA, USA
Braehead Retail & Leisure Park	Glasgow, Scotland
Bur Juman Centre	Dubai, UAE
Caldor Department Store	Brooklyn, NY, USA
Canal City Development - Al Quoz	Dubai, UAE
Centre at Hagerstown	Hagerstown, MD, USA
City Center Master Plan Extension	New Cairo City, Egypt
Columbus Air Force Base Shopping Center	Columbus, OH, USA
Concord Shopping Parkade	Charlotte, NC, USA
Costco Danville	Danville, CA, USA
Costco Warehouse Club Store	Staten Island, NY, USA
Craiova Mall	Bucharest & Craiova, Romania
Crescent Parking Structure Estimate	Montclair, NJ, USA
Criterion Theatre Plaza	Santa Monica, CA, USA
Crystal Hall	Jersey City, NJ, USA
Dan Daniels Distribution Center	Newport News, VA, USA
Del Norte Parkade	Albuquerque, NM, USA
Dubai Maritime City	Dubai, UAE
Dulles International Airport Shopping Mall	Washington, DC, USA
Emery Station	Emeryville, CA, USA
Fashion Center	Paramus, NJ, USA
Fort Eustis Shopping Center	Fort Eustis, VA, USA
Fort Monroe Post Exchange Shopping Center	Fort Monroe, VA, USA
Fort Nassau Graphics Building	Thorofare, NJ, USA
Galaxy at Dadeland	Miami, FL, USA
Genesee Country Mall	Genesee County, NY, USA
Glenpointe Mall	Teaneck, NJ, USA
Great Marlborough Street	London, UK
Hoboken Waterfront Development	Hoboken, NJ, USA
Hollywood Galaxy Commercial Center	Los Angeles, CA, USA
Holmdel Town Center	Holmdel, NJ, USA
Kmart	Lincoln, Park, MI, USA

Project Name	Location
La Ville Contemporane	Dubai, UAE
Langley AFB Base Exchange Store	Newport News, VA, USA
Macklin Street	London, UK
Macy's Hamilton Mall	Hamilton Township, NJ, USA
Madinaty - Open Air Mall	Cairo, Egypt
Magic World City & Festival Market	Dubai, UAE
Maitland Green Office Building and the Concourse	Orlando, FL, USA
Mall of Arabia	Dubai, UAE
Marina Mall Extension Project	Abu Dhabi, UAE
Monroeville Merchandise Mart	Monroeville, PA, USA
Montgomery Ward Distribution Center	Irvine, CA, USA
Morrison's Super Store	Wellingborough, UK
Newport News Distribution Center	Newport News, VA, USA
Nordstrom - Pentagon City Mall	Arlington, VA, USA
Ocean One Shopping Mall	Atlantic City, NJ, USA
Old Post Office East Atrium	Washington, DC, USA
Oxford Valley Mall	Langhorne, PA, USA
Philadelphia Food Distribution Center	Philadelphia, PA, USA
Quaker Bridge Mall	Lawrence Township, NJ, USA
Regency Square Shopping Mall	Boulder, CO, USA
Rite Aid	Philadelphia, PA, USA
Ryadah City	Saudi Arabia
Sakanel Project	Tbilisi, Georgia
Santa Monica Mall	Santa Monica, CA, USA
Santa Monica Plaza	Los Angeles, CA, USA
Sears	Poughkeepsie, NY, USA
ShopRite Supermarket	Williamstown, NJ, USA
Showcase Mall	Las Vegas, NV, USA
Spring Mall Building	Springfield, VA, USA
Studio City Place	Studio City, CA, USA
The Galleria	London, Ontario, Canada
The Gardens Development	Jebel Ali, Dubai, UAE
The Home Depot, Clifton	Clifton, NJ, USA
The Home Depot, Plymouth	Plymouth, MI, USA
The Towers	State College, PA, USA
TMG Properties	Egypt
Today's Man	King of Prussia, PA, USA

Project Name	Location
Town Center	Murfreesboro, TN, USA
Union Hill Shopping Center	Union Hill, NJ, USA
Universal Citywalk	Los Angeles, CA, USA
Wal-Mart	Scranton, PA, USA
Walden Galleria	Buffalo, NY, USA
Walmart	Smyrna, DE, USA
Westchester Fashion Mall	White Plains, NY, USA
Wheeler's Las Vegas Recreational Vehicles	Las Vegas, NV, USA
Whitehall Mall Renovation Project	Whitehall, PA, USA
Willingboro Town Center	Willingboro, NJ, USA

Select Clients

- Active Environmental Technologies, Inc Al Ghurair Centre
- Al Oula Real Estate Development
- American Arbitration Association
- Army & Air Force Exchange Services
- Asticus (UK) Limited
- Ballast Wiltshier plc
- Cohen & Huntington, P.C.
- Del Norte Association
- Development Solutions LLC (DS)
- Dubai International Properties
- El Taller Colaborativo, P.C.
- Enterprise Group Development Corporation
- Fashion Center, LLC
- Hewcon Ltd. & Bovis Construction, Ltd.
- Hill - TMG Project Management Services
- Host Marriott Services
- Ilyas & Mustafa Galadari Management Investment & Development L.L.C.
- International Investments
- Kravco Company
- Majid Al Futtaim Group
- Mayadeen
- Meraas Development
- Mona Electrical Construction, Inc.
- Philadelphia Industrial Development
- Pyramid Management Group, Inc.
- R.A.S. Builders, Inc.
- Sears-Roebuck & Company
- Talaat Moustafa Group (TMG)
- Terry Construction Company
- The Home Depot
- Zallie Enterprises, Inc.

Abu Dhabi Trade Center

Abu Dhabi, UAE



Client:
National Bank of Abu Dhabi

Service:
Project Management
Oversight

Total Project Value:
\$233,000,000

Completion Date:
2002

The Abu Dhabi Trade Center was the first development privately funded by local and international financial institutions in Abu Dhabi. Hill International reviewed the project's progress and made certain that all disbursements matched actual, physical completion for the banks. Hill also helped assure that the completion was being accurately forecast, and that the quality of the work was of the highest standard.

The first phase of construction, valued at approximately \$140 million, included the construction of a seven-level podium structure comprising two levels of underground parking and five levels of office and retail space. The parking area includes 2,000 parking spaces; the retail area totals approximately 63,000 m² and provides for some 200 retail tenants.

The second phase of construction, valued at approximately \$93 million, included construction of two office towers, the five-star Beach Rotana Hotel & Towers, a serviced apartment tower, and an additional 800 parking spaces.

Hill provided comprehensive project management oversight services for this massive project. Specifically, Hill oversaw and reported on the project's cost, schedule, and quality for a consortium of eight banks, led by Abu Dhabi National Bank, which financed the development of this design/build project

for His Excellency Sheikh Suroor Bin Mohamed Al Nahyan.

Hill developed an initial assessment report for each phase of construction, provided subsequent detailed monthly reports, and verified all progress payments. Hill also helped the banks understand various technical aspects of the project, as well as the tasks required to complete a project of this magnitude.

Al Khor City

Al Khor, Qatar



Al Khor City is a QR 30 billion development being constructed on 5.4 million m² of oceanfront land in Al Khor, Qatar, located about 57 meters north of Doha, the middle eastern nation's capital. Al Khor City is being built to accommodate a burgeoning population in the area, which is home to several internationally prominent petroleum companies and is quickly becoming a mecca for business and tourism.

When completed in 2015, Al Khor City will include more than 24,000 villas, townhomes and flats, two hotels, 250,000 m² of office space, a shopping mall, four schools, a mosque, library, clinic, golf course, green and recreational space, and myriad private beaches. In all, the development, encompassing a built-up area of 3.6 million m², will accommodate an estimated 60,000 people.

The development will be constructed along and in an existing harbor. Its oceanfront views will be complemented by panoramic views of the city of Al Khor.

Hill was selected by the project owner and developer, Barwa Al Khor, to provide project management and project management oversight services for this innovative development. The project is expected to be completed in 2015.

Client:

Barwa Al Khor Co. W.L.L

Service:

Project Management
Project Management
Oversight

Total Project Value:

\$8,237,684,661

Completion Date:

2015

Quote:

"Barwa Al Khor Development has benefited from the involvement of Hill International as the Project Manager. The Hill team brought to the project its wealth of experience, skills and knowledge. The commitment and the professionalism displayed by the entire team during the duration of the project were commendable."
Eng. yousuf Ahmad
Al Hammadi, CEO for
Barwa Al Khor

Al Rawda Commercial Center

Dubai, UAE



Client:
Dubai International
Real Estate

Service:
Project Management

Total Project Value:
\$11,000,000

Completion Date:
2003

Hill International was retained by Dubai International Real Estate, owned by His Highness Sheikh Hamdan Bin Rashid Al Maktoum, to be their representative and Project Manager for the design and construction of a new prestigious commercial center, located at the luxurious beach suburb of Jumeirah, in Dubai.

The center is a commercial development that incorporates two parking basement floors, one ground floor containing retail shops and restaurants, and one first floor containing commercial offices. The design style of the center is resolved as a European Village.

Hill managed the design and construction through main contract package and various trade sub-packages. Project was completed in December of 2003.

Al Waab Mall

Doha, Qatar



Client:
Alfiya Holding

Service:
Project Management

Total Project Value:
\$110,000,000

Completion Date:
2012

Hill is providing project management services for the Al Waab Mall, which will be a three-story retail development with parking facilities for 1,300 cars located in the Fereej Al Amir District at the center of Doha City. Al Waab Mall will offer 425,000 Sf of leasable space including a hypermarket, department stores, restaurants, food court and various types of retail outlets. The \$110 million project is expected to be completed by January 2012.

City Centre Master Plan Extension

Alexandria, Egypt

Client:
Majid Al Futtaim Group

Service:
Project Management

Completion Date:
2008



Hill International assisted MAF Misr in the Alexandria City Centre Extension Project to radically change the interior and exterior elements of the mall enhancing its landscape with water features and brand new external lighting effects. The mall doubled in size as the expansion was on the north side to the existing mall with gross lettable area of 27,900 m² and over 90 additional stores.

The project was divided into three phases to include building of the new mall, renovation of few stores in the existing mall and construction of the parking lot. Hill International provided project management consultancy services during the design development stage, appointing of design consultants, establishment of packaging and phasing strategies, tender preparation, tenders evaluations and award, construction works and completion dates.

American Commerce Center

Philadelphia, PA



Client:

Hill International
Real Estate Partners/
Kennedy Associates
Real Estate Council

Service:

Project Management
Acquisition & Development
Leasing
Marketing

Total Project Value:

\$1 Billion

Hill International's subsidiary, Hill International Real Estate Partners, LP, is the developer for the proposed American Commerce Center (ACC). The 2.2 million SF office and hotel tower will be the tallest skyscraper in Philadelphia, and one of the tallest buildings in the world, with a height of approximately 1,510 feet. Hill International is the project manager.

In height alone, the American Commerce Center will join the ranks of superstructures Taipei 101, the Petronas Towers in Kuala Lumpur, the Sears Tower and the Empire State Building. The ultramodern architecture and sheer magnitude of the skyscraper is a truly captivating symbol of power and arrival for Philadelphia – a city now in competition with worldwide financial and innovation epicenters.

With its 300 ft spire piercing the skyline and its glass curtain wall exterior, the Center will reinvent the skyline, simultaneously complementing and modernizing the image of Philadelphia's historic architecture. The unique shape of the building will include a 63-story tower for Class-A office space with unparalleled amenities, public gardens and high-end retail and restaurants. A two-story skybridge will overlook the city streets and connect the tower to a 26-story, five-star hotel, while the shops and gardens on the first levels hum with activity and engage the skyscraper at the street.

American Commerce Center

Along with a landscaped plaza, the structure will accommodate four tiered roof gardens and terraces on the third, fourth, sixth and twenty-seventh floors. A series of elevators will traverse these public spaces to make them accessible and physically interconnected, while urban windows carved out of the hotel building will visually connect the public spaces. Its captivating human scale is equally important to the ACC's success as its height.

Progressive in every element of its design, the Center will also bring sustainability to the Philadelphia skyline. Its integration of high-performance technologies will optimize water conservation, energy consumption and indoor air quality. Its overall design will maximize open space and provide direct connections to sustainable transportation through an underground concourse to Suburban Station. The Center will show national leadership by targeting Gold-level LEED Core and Shell Certification.

Ampliacion Centro Comercial Parquesur

Leganes, Madrid, Spain

Gerens Hill International carried out the extension works of Centro Comercial Parquesur, which at the time was Madrid's second most popular shopping centre (12 million visitors/year). The majority owner, Rodamco Inversiones, counted on our team for the management of this project, drawn up by the architects Reid Fenwick & Benoy (United Kingdom), entailing an approximate investment of 90 million Euros. The central mall approximately covers a total distance of 1 kilometre.

The shopping centre was awarded Best Extension Project of the year and, amongst other particularities, at the time counted on Europe's largest cybernetic fountain to project water shows.

The extension works included a building that hosts 25 Cinemas and approximately 80 new shops, which have joined those already existing. This extension entailed coordination work to ensure that the activity of the operating shopping centre was not affected in any way whatsoever.

Client:
Rodamco

Service:
Construction Management
Project Management

Total Project Value:
\$90,000,000

Completion Date:
2005

Andalusia Square Towers

Jeddah, Saudi Arabia



Client:

Kinan International
Company for Real
Estate Developmet

Service:

Project Management

Total Project Value:

\$12,300,000

Completion Date:

2011

The Andalusia Square Towers development is anticipated to further shape Jeddah's city skyline and will cover a total built-up area of more than 268,000 m² (2,883,680 SF). The project is planned as an integrated mixed use development including offices of up to 124,000 m² (1,334,240 SF), residential apartments of 70,000 m² (753,200 SF), a 5-star hotel of 35,000 m² (376,600 SF), high-end retail of approximately 39,000 m² (419,640 SF) and parking for 4,000 cars. The project is located close to Jeddah's Central Business District and strategically situated at the intersection of King Abdullah Road and Al Andalus Street. The project is designed by Nikken Sekkei Ltd., a world-renowned architectural firm, and is planned to be completed in early 2011.

The 42-month contract has an estimated value to Hill of approximately SR 45.8 million (\$12.3 million).

Baneasa Office and Retail Complex

Bucharest, Romania



Client:
Baneasa Development

Service:
Project Management

Total Project Value:
\$3,800,000

Completion Date:
2009

Hill provided Baneasa Development project management services for the Baneasa Project in Bucharest. The Baneasa Project will be comprised of commercial retailers, residential houses, office buildings, hotels, schools, showrooms and a community/village center. The project includes a shopping mall and two pairs of five-story office buildings.

Baku Flame Towers

Baku, Azerbaijan



Client:
Azinco Development MMC

Service:
Project Management

Total Project Value:
\$350 Million

Completion Date:
2011

Hill International is providing project management services during construction of the iconic Flame Towers in Baku, the capital city of the Republic of Azerbaijan.

The \$350 million project will feature three high-rise towers ranging in height from 34 to 39 stories. The three towers will contain hotel, office and residential space, and will be linked by centrally located retail and leisure facilities. The development, which will total 235,000 m², or 2.53 million SF, is located on a prime site in the city of Baku, with views of the Caspian Sea.

Bur Juman Centre

Dubai, UAE



Client:
Al Ghurair Centre

Service:
Project Management

Total Project Value:
\$100,000,000

Completion Date:
1991

Bur Juman Center in Dubai is a spectacular five-level, post-modern shopping mall with one million SF of developed shopping area. The glass and marble interior contains three sky-lit atrium courtyards accented with lush plantings. All interior shopping corridors are bathed in natural light from tinted skylights. The Center was completed in December 1991 in accordance with the original Master project schedule in spite of the procurement difficulties caused by the Gulf War and numerous changes and additions by the owner to adopt the facility to differing tenant requirements.

Hill International provided complete Project Management Services to the project's owner and developer, the Al Ghurair Group, including management of consultants and contractors, and served as Agent to the owners / developers. This project introduced the UAE to professional project management services, and introduced the UAE to the use of multiple lump sum contracts. Design, procurement, and construction was fast-tracked and completely integrated into the project's planning. Twelve major concurrent multiple lump sum fixed price contracts using international contractors were let for the project. Hill trained contractors to perform in accordance with project standards for costs, scheduling, quality control and reporting systems. While none of the contractors had previous experience with multiple prime bidding, these contractors are now the best possible advertisement for the Hill standard project management system.

Centro Comercial AireSur

Sevilla, Spain

The AireSur Shopping Mall is a set of retail spaces with no leisure facilities and has a medium commercial space as part of the complex (Ikea) with which it shares an underground parking lot.

Parque Castilleja, S.L. was the Promoter of the project, which was financed by the Aareal Bank. Gerens Hill International undertook the Technical Due Diligence as commissioned by the financial entity, as well as completed the Building Risk Evaluation Analysis and Report for the Leisure Center developed in the second phase of the project as implemented by Ejecución de Planeamiento, S.L.

The Shopping Mall was built on a 27,600 m² surface with a Gross Rentable Surface of 21,400 m², plus 77,400 m² assigned to underground parking facilities. The annexed medium sized surface annexed totals 22,000 m².

Client:
Aareal Bank

Service:
Project Management
Oversight

Total Project Value:
\$103,700,000

Completion Date:
2006

Centro Comercial Bahia Sur

San Fernando, Cadiz, Spain

Renovation works in the Shopping Centre were part of the adjustments made to the Bahía Sur Shopping Centre further to a Specific Amendment of the San Fernando General Urban Development Plan.

The project was located in the northeastern part of the sports/hotel/shopping complex. The Centre's Leisure area, open to the outside, was redesigned as a roofed mall with a skylight projecting a large Restaurant & Bar gallery. Gerens Hill International was in charge of the Project & Construction Management.

The construction budget for the extension works amounts to 2 million euros.

Client:
Rodamco

Service:
Construction Management
Project Management

Total Project Value:
\$2,000,000

Completion Date:
2005

Centro Comercial Cuadernillos

Alcala, Madrid, Spain

The “Los Cuadernillos” Shopping and Entertainment Center Project covers a broad range of activities, from the building of medium-sized stores, an Entertainment building with areas devoted to restaurants, cafeterias and bars, a bowling alley and movie theaters and measures to be taken on infrastructures on the N-II highway: modification of bridge over highway and work on service roads and entrances to the Shopping mall.

The Project was carried out by ASSETALIA as the Developed, with Agreal Bank Financing. Gerens Hills provided its technical consulting or Project Monitoring services to the Financial Institution during the construction process.

This Project was designed and divided into two sections: Entertainment building by “ARPV Arquitectos S.L.” and infrastructures development by the engineering firm “TT&U” -“Técnicas Territoriales y Urbanas”.

The parcel measures approximately 67,275 m², on which there is a GLA of approximately 35,200 m² and 8,000 m² of Movie Theaters.

The construction estimate is of 33 million Euros for a total estimated investment of 65 million Euros.

Client:
Aareal Bank

Service:
Project Management
Oversight

Total Project Value:
\$33,000,000

Completion Date:
2006

Centro Comercial Paseo de Luna

Granada, Spain

The company Project Sierra Spain 3 Centro Comercial S.A. is in charge of executing the Shopping Centre in Pulianas (Granada), for which Gerens Hill International carried out the Project and Construction Management.

The Project involved the construction of a Shopping Centre on a plot located within the Partial Plan PPI-03 Pulianas "La Retama". The plot covers an area of 140,000 m².

The Project is being developed by Promontorio Architects.

The shopping centre consists of two areas:

- A shopping centre arranged on three floors, without a basement. The ground-level floor is a parking lot on which two shopping floors are constructed. The total constructed surface area is estimated at 45,047 m², with a GLA of 28,000 m².
- A retail park, built on a single floor without a basement. The constructed surface area is approximately 17,000 m², entirely considered GLA. The rest of the plot is used as a ground-level parking lot, occupying approximately 69,000 m², for a total of 2,700 spaces.

The execution cost is 52.7 MME.

Client:
Sonae Sierra

Service:
Project Management

Total Project Value:
\$52,700,000

Completion Date:
2009

Columbia Heights Revitalization Program

Washington, DC



Client:
RLARC/NCRC
(RLA Revitalization
Corporation/National
Capital Revitalization
Corporation)

Service:
Project Management
Oversight

Total Project Value:
\$160 Million

Completion Date:
2007

Hill International received a contract from the RLA Revitalization Corporation (“RLARC”), a subsidiary of the National Capital Revitalization Corporation (“NCRC”), to provide construction support services for several major projects of the Columbia Heights Revitalization Program. The goals of this major initiative were to restore the community and improve living conditions for residents in the greater Columbia Heights neighborhood of Washington, DC, which is located around the 14th Street corridor from Newton Street on the north to Chaplin Street on the south.

NCRC was a publicly-chartered corporation charged with spurring the revitalization of underserved and emerging neighborhoods in the District of Columbia through strategic business and real estate development and partnerships designed to enhance job creation, community amenities, and citizen empowerment. RLARC is a subsidiary of NCRC charged with the management and disposition of a portfolio of more than 80 parcels of real property located within the District.

The projects involved include:

DC USA—a 550,000 SF retail development that includes big box and smaller retailers, restaurants, a health club and a nearly 1,400-car underground parking garage. Projected cost: \$130 million

The Heights of Columbia—a 96,000 SF mixed-use development that includes 78 for-sale housing units as well as retail space and a 70-car underground parking garage. Projected cost: \$22.1 million

Verona Parc—a new 32,000 SF residential building which includes 33 condominium units. Projected cost: \$8 million

Hill's services include design review, scheduling, budget and cost control, contract administration, project reporting and on-site construction monitoring for each of the projects. Hill also managed a traffic plan for vehicular, pedestrian and construction traffic along the 14th Street corridor.

Monitoring and coordinating various site conditions/elements at the DCUSA project included: removal of underground storage tanks along with the removal and replacement of contaminated soils; coordinating with utility companies for the rerouting of existing utilities which ran through the site; reviews and approvals of streetscape improvements and plans; issues of truck access and pedestrian traffic coordination.

City of Arabia

Dubai, UAE



Hill International is managing the design and construction of this \$2 billion (USD) City of Arabia leisure and entertainment complex in Dubai. The City of Arabia will be located in the center of a larger, multi-billion-dollar leisure and entertainment destination to be called Dubailand. When finished, it will be the largest “lifestyle development” in the Middle East. The City of Arabia will include 20, 45-story towers, 10 30-story towers, four-star and three-star hotels, 1,400 apartments and a theme park called the “Restless Planet,” featuring pre-historic and Mesozoic attractions and exhibits designed to simulate “the dinosaur experience.” The complex will include a myriad of shops and cafes along picturesque canals and other man-made waterways in a Venice-like setting, to be known as “Wadi Walk.”

The complex also will include the “Mall of Arabia,” one of the world’s largest shopping malls. The mall includes Middle Eastern exterior housing the best of international fashion brands, a state-of-the-art stage for theatrical performances, a 15-screen cinema, a bowling alley and a world class spa. The mall will be directly linked to the Restless Planet dinosaur theme park, the village atmosphere of the Wadi Walk canals and other areas of the City of Arabia via three monorail stations. The Mall of Arabia project will comprise a perimeter of 2.3 kilometers (1.4 miles), employ up to 16,000 workers at the peak of construction and anticipates a need for at least 2 million cubic feet of concrete. Construction is expected to begin in December 2007 and be completed by April 2010.

Completing this extensive mixed-use development will be an automated people mover (APM), which will include 13 stations connected by an elevated track and will provide easy access to the City of Arabia for both residents and visitors. Plans are already in place to link the APM to the future Dubai Metro.

The project is part of a massive construction effort by various developers in Dubai to transform the emirate into a premier destination for both business and vacation travelers. When completed in 2010, the 20 million SF City of Arabia complex will accommodate more than 34,000 people.

Client:

Ilyas & Mustafa Galadari
Management Investment
& Development

Service:

Construction Management
Project Management

Total Project Value:

\$2,000,000,000

Completion Date:

2010

Quote:

“Hill provided considerable service in initiating, conducting and managing value engineering activities that have resulted in substantial savings in time and cost.”

Alex Vacha, Deputy
Director for Projects

Comcast Center

Philadelphia, PA



Client:
Liberty Property Trust

Service:
Project Management

Total Project Value:
\$600 Million

Completion Date:
2008

Green Design:
LEED Certified, LEED
Certified - Gold

Awards:
2009, Best Office Project
of 2008, McGraw-Hill's
Mid-Atlantic Construction
2008, Project of the Year,
Mid-Atlantic Construction
2008, Project of the Year,
Honorable Mention,
Delaware Valley Chapter of
the Project Management
Institute (PMI)

Quote:
"I wanted to let you know
how pleased we are
with the progress on our
Comcast Center project and
to thank you for the efforts
of your team in making it
a complete success. The
Liberty Property Trust is
very proud of the Comcast
Center project and its
LEED certification."
John G. Spitz, Vice
President, Liberty
Property Trust

Hill International provided project management services on the Comcast Center, the tallest LEED-certified building in the U.S. as of November 2009. Services included design review, document control, cost estimating, scheduling, and overall project management.

The 58-story skyscraper, designed by Robert A.M. Stern, includes 1.25 million SF of Class AA office space and 40,000 SF of retail space. Located in Center City Philadelphia, Comcast Center features a dramatic 110-foot-high winter

garden, two-story glass cafe, 15 atrium floors, and a four-story sky garden located 735 feet above a public plaza. The Comcast Center is 975 feet tall and is the tallest building in Philadelphia (cited 2009) as well as the tallest building between New York City and Chicago.

Comcast Center is the worldwide corporate headquarters of Comcast Corporation, one of the leading providers of cable, entertainment, and communication services in the world. Comcast occupies 39 of the building's 58 floors, or nearly 70 percent of the total square footage of the building.

The building was designed to meet stringent environmental standards, and is LEED gold level certified by the U.S. Green Building Council. Certification under the LEED rating program has been granted to office buildings, schools and universities, museums and other public spaces, homes and other structures throughout the U.S. The Comcast Center incorporated the following green features into the design:

- The Comcast Center's responsible urban planning enhances downtown Philadelphia by locating its entire 52,000 SF parking facility underground, which keeps Philadelphia cooler by limiting hardscape surfaces exposed to the sun.
- The Comcast Center's location is located less than one-half mile from mass transportation. By limiting on-site parking to only 1.5 percent of its occupants, the Center discourages commuting by car, and provides electric car charging stations to encourage the use of low-emission alternative vehicles. Occupants' extensive use of mass transit has the potential to reduce carbon emissions by as much as 50 percent.
- The Comcast Center implements extensive water-saving measures to reduce its use of potable water use, including bathrooms with low-flow fixtures and waterless urinals.
- The Comcast Center's glass curtain wall blocks 60 percent of the heat from the sun, while allowing 70 percent of the sun's visible light to be transmitted into the spaces. This provides ample daylight while reducing energy used for air conditioning and unnecessary lighting.
- The Comcast Center is committed to sustainable waste management and recycling. Even before construction began, the Center recycled over 75 percent of the waste from demolishing the previous building, diverting it from a landfill.
- Natural light is abundant in the Comcast Center. The dramatic eight story Winter Garden on J.F.K. Boulevard and third- and fourth-floor atria on the building's south façade brings natural light deep into the building. The extensive daylighting significantly reduces lighting costs and increases occupant connection to the outdoors.

In addition to its distinction as an environmentally-sustainable building, the Comcast Center has won several national and regional industry awards. The project was named a "Best Private Project Over \$10 Million" by the Construction Management Association of America, and the "Best Office Project of 2008" by McGraw-Hill Construction.

Transportation-Friendly Development

The Comcast Center's location encourages mass transit and thus benefits Philadelphia's environment and urban health. The Center is located less than one-half mile to Amtrak rail, New Jersey Transit rail, SEPTA rail, subway and bus with a SEPTA railway station directly underneath. The convenient access to mass transit encourages building occupants to commute by these low-pollution, low-congestion options. By limiting on-site parking to only 1.5% of occupants, the Center discourages commuting by single-rider vehicle. For those who commute by car, the Center provides electric car charging stations to encourage a low-emission alternative. Occupants' extensive use of mass transit has the potential to reduce carbon emissions from commuting by 50%. This is equivalent to as much as ten tons of carbon daily, or the amount of carbon forty acres of trees remove daily from the air.

Cosmopolitan Resort & Casino

Las Vegas, NV



Client:
Friedmutter Group

Services:
Construction Management
Program Management
Project Controls
Estimating

Total Project Value:
\$3 Billion

Completion Date:
2010

The Cosmopolitan Resort and Casino is a \$2 billion, boutique, mixed-use, luxury condominium-hotel resort on the famed Las Vegas strip. The Cosmopolitan rises 50 stories on approximately 8.5 acres and contains more than five million SF of development. Construction includes two high-rise hotel and condo-hotel towers approximately 600 feet tall with 3,000 luxury hotel rooms, suites, and condo-hotel residences; 150,000 SF of convention and meeting space; a 75,000 SF casino; 300,000 SF of exclusive retail boutiques and restaurants; an 1,800-seat theater; a 500-seat cabaret; a 50,000 SF exclusive spa, salon and fitness center; multiple dining and entertainment venues; the Cosmo Beach Club, a five-acre pool deck that overlooks the Strip; and a 3,800-car, five-level underground parking structure.

The project is unique in the Las Vegas area, in that the parking is situated below grade with the five-story podium including the casino, hotel lobbies, retail establishments, themed restaurants, convention and meeting areas, an event center, and the roof-top pool decks built above. The parking structure and podium are steel-framed with the towers constructed of cast concrete.

The fast-tracked project called for an aggressive, around-the-clock construction schedule. In addition, numerous owner-directed design changes were made during construction, including the addition of building floors and

the relocation of a rooftop swimming pool, resulting in a challenging and dynamic design, procurement and construction environment.

Hill International, Inc. provided project management support services to the Friedmutter Group, the Architect-of-Record on the project. Hill staff is assisting the Friedmutter Group in design, construction, planning and scheduling, estimating and cost control, coordination of the RFI process, and resolution of change orders.

Hill also provided construction-phase cost estimating support to verify structural steel scope, quantities, and weights. Hill was responsible for reviewing more than 135 steel change orders that resulted from owner-directed design changes, which added more than \$80 million to the initial \$90-million structural steel cost estimate. Additionally, Hill is tracking the costs of time and material for ongoing steel retrofit work, as well as tracking miscellaneous steel contract costs to help mitigate steel costs associated with owner-directed design changes. “To date, we have saved the owner over \$35 million by correcting the amount of steel needed to meet the design changes,” a Hill spokesperson for the project said.

Bawadi

Dubai, United Arab Emirates



Client:
Dubailand

Service:
Program Management
Project Management

Total Project Value:
\$30 Billion

Completion Date:
2006

Bawadi, located about 19 kilometers south of the Dubai International Airport, is a major entertainment destination within the larger Dubailand that surrounds it, as well as in Dubai as a whole. Also known as the “Dubai Desert Gateway,” the development spans ten kilometers in length and is one kilometer wide. A total of 51 resort hotels are being built in two phases along a ten-kilometer boulevard. The \$30 billion project also includes the construction of high-end retail shops, entertainment venues, indoor and outdoor sports facilities, convention facilities, theme parks, and several restaurants. The first of the hotels are scheduled to open in 2010; the remainder are slated to open in 2014. In all, the hotels will provide an estimated 65,000 rooms for visitors from around the world.

The largest of the hotels is Asia-Asia, which contains an unprecedented 6,500 rooms. Iconic ‘gateway’ buildings, housing office and hotel space, will be constructed at either end of the walkable boulevard. Destinations along the boulevard also will be served by a monorail. The development project also includes the construction of all necessary roads, mass transit systems and utilities. Apartment buildings, to provide up to 85,000 apartment units, will be constructed separately on either side of Bawadi. Hill provided both program and project management services during the first phase of the massive project.

Dubai Marina Mall, Hotel and Residences

Dubai, UAE



Client:
EMAAR Properties

Service:
Project Management

Total Project Value:
\$627,000,000

Completion Date:
2008

The Dubai Marina Mall, Hotel and Residences project is a mixed-use commercial and residential project serving the Dubai Marina, Dubai’s beach hotels, Internet/Media City and the Emirates Hills community.

The net leasable area of the mall retail outlets is approximately 340,000 SF. The project also includes a 43-story, high-rise, five-star hotel that will include 200 guest rooms and 442 fully serviced apartments, restaurants and other guest amenities. In addition, the development, valued at more than \$490 million (USD), will include 3,500 parking spaces.

Hill’s responsibilities included monitoring and providing advice and recommendations to the client on all design, procurement, tendering and construction activities, as well as coordinating the tenants’ needs. Hill’s scope also included development of document control and project control procedures, as well as comprehensive design, construction and program management.

Dulles International Airport Shopping Mall

Washington, DC



Client:
Host Marriott Services

Service:
Construction Management

Total Project Value:
\$7,000,000

Completion Date:
1997

Hill International performed construction management services for the renovation of the terminal concessions and shops, creating a shopping “mall” inside the airport terminal.

Services included on-site management of demolition of existing facilities and new construction, cost estimating, scheduling, and contract administration.

The newly renovated terminal contains many upscale shops including Bally’s, the Nature Company, Brookstone and Bath & Body Works along with a variety of eating establishments such as Starbucks Coffee, TCBY, Burger King, Chili’s and Cinnabon. Traditional newsstands, souvenir shops and pubs were updated and modernized.

The Gardens Development

Jebel Ali, Dubai, UAE



Client:
Nakheel PJSC

Service:
Project Management

Total Project Value:
\$300,000,000

Completion Date:
2004

Quote:
“The Hill team continues to prove itself essential to the Projects’ success through foresight, understanding of project needs and tireless effort to provide professional project management services.”
Saeed Ahmed Saeed
Managing Director,
Engineering Projects
Nakheel Properties

Hill International managed the design and construction of The Gardens residential and retail development, two fast-track projects with aggressive schedules. The Gardens is primarily a residential development, but also includes facilities such as schools, playgrounds and a major shopping complex in order to provide various amenities for the residential community.

Phase I of the development included the design and construction of 3,827 apartment units, together with all necessary infrastructure and local amenities. The low-rise housing complex consisted of 129 separate three-story buildings comprised of a mixture of one-, two- and three-bedroom apartment units, at a total project cost of \$190 million.

Phase II of the project, The Gardens Shopping Mall, comprises more than 1.5 million SF of retail space, over 1.6 million SF of a themed parkland and attraction complex, and parking for more than 4,000 cars, resulting in a total of more than 5 million square feet under development at a total cost of \$110 million. A dedicated interchange on the major Sheikh Zayed Road provides access to the Mall.

The Mall was designed by specialist architects Callison Inc. (USA) and is theme-based on the journeys of the renowned Arab scholar and traveler,

Ibn Battuta. In keeping with this theme, architectural treatments and iconic structures will represent the several cultures and regions through which he traveled-including Andalusia, Tunisia, Morocco, Egypt, India and China.

Hill provided a range of project management services throughout both phases of The Gardens project, including design management, value engineering, alternative design development, advance procurement of owner-furnished items and on-site construction management.

In order to achieve the aggressive schedule and tight budget, Hill's team utilized different approaches in procurement methods such as advance procurement of finishing materials that were provided to the building contractors as owner-furnished items, pre-qualification of contractors with established building systems, and segregating construction packages to allow for advanced commencement of the infrastructure construction.

Hill also assisted in the retail positioning and mix of the mall through a close liaison with appointed Mall managers and locally appointed design consultants, to ensure that the final design brief followed best practice in terms of mall and tenancy size, position and layout. Hill assisted the client in incorporating non-retail elements such as the landscaped "mazes" and other outdoor attractions into the overall development plan for the Mall, while maintaining the retail emphasis and overall project goals.

Madinaty - Open Air Mall

Cairo, Egypt

Client:
Hill - TMG Project
Management Services

Service:
Project Management

Hill, working with the Talaat Moustafa Group, is managing the construction of the Madinaty Open Air Mall project in Cairo, Egypt. The project contains a 4 Seasons Hotel, Mega Hall, Landscaped Area, Retail Area, Entertainment Area, Residential Units, Commercial Units, and all associated services and utilities.

The mall will total 1.3 million SF. Retail space will be constructed within ten separate buildings, each located alongside to a lushly landscaped central park. The entryway of the mall also will serve as visitors' entry to Madinaty, a massive mixed-use development in the city's "New Cairo" district. Madinaty will accommodate tens of thousands of visitors and include residential, commercial, retail and entertainment facilities, as well as extensive parklands and public space.

The Madinaty Open Air Mall project is one of nine hotel and resort projects that Hill is managing in conjunction with the Cairo-based development firm.

Plot 04 at Dubai Maritime City

Dubai, UAE

Client:
Mayadeen

Service:
Project Management

Completion Date:
2011

Mayadeen purchased Plot No. 04, located at the harbor office district of Dubai Maritime City (DMC) for investment purposes, with the aim of maximizing its return by developing a mixed-use commercial and retail building.

The DMC's master development plan provides design and construction regulatory framework that defines the requirements for each individual parcel. Plot 04 has an area of 9,774 m² with maximum GFA of 50,090 m² for a tower, 9,683 m² for a podium liner and 59,773 m² for a tower plus a podium. The allowable heights of the tower and podium are 24.1 meters and 200 meters respectively from the ground floor elevation to the top of the structure.

As the Project Manager, Hill International will provide pre-design management services that include preparation of project management plan and master schedule, preparation of TOR for Design Consultants (A/E) and evaluation of their proposals which leads to recommendation to the Employer. During the design and tendering stage, Hill will review and issue tender documents to Contractors and conduct a constructability analysis. Hill will monitor cost and time, safety and quality control, and the overall site inspection until the commissioning and handover of the project.

Ponderay Retail Building

Sandpoint, ID

In January of 2008 Hill International, Inc. was asked by KCO Investors to assist in the project closeout/construction management of the Ponderay Retail Building located in the city of Ponderay, a suburb of Sandpoint, Idaho.

When Hill became involved with this 9,975 SF project, it was mostly complete. However, the Owner did not have the ability to develop and execute a plan to close out the project. Through a previous project relationship, Hill was asked to develop the project closeout plan and get the project to the final completion stage. Research into the project documents revealed that they were very limited, consequently Hill needed to work with the contractor and his subs to develop a common understanding of what needed to be done to complete the incomplete work tasks and also to gather the project closeout documentation. Discussions centered on industry standards and the level of professional workmanship expected by the Owner. This negotiation process was successful primarily due to the cooperative nature of the general contractor (GC), but also due to the manner in which the various requirements were presented.

Currently, the south half of the facility is leased to a flooring supplier and the Owners are actively seeking tenants for the north portion of the building currently set up for three units, but presently is an open shell to allow flexibility of future tenant improvements.

Client:
KCO Investors

Service:
Construction Management

Total Project Value:
\$750,000

Completion Date:
2008

Walden Galleria

Buffalo, NY

Client:
Pyramid Management
Group, Inc.

Service:
Estimating

Total Project Value:
\$74,000,000

Completion Date:
2006



Regal Entertainment Group and Pyramid Management Group, Inc. announced plans to build three new theatres in Upstate New York and one new theatre in Kingston, MA. The theatres anchor each of the four shopping center's ThEATery project, a "best of the best" environment that combine fine dining, interactive retail, and state of the art entertainment and ultimately serve as the hub of its community.

One such project is the Walden Galleria (Galleria). Currently, the Galleria is a premier shopping complex with over 1.5 million square feet of upscale stores featuring 8 anchor tenants and over 100 specialty stores, and is one of the largest in the Northeast. About 25% of the existing complex was renovated and converted into high-end restaurants and eateries and as well a 16 screen multiplex stadium seating theater. The new state-of-the-art theatres in the shopping centers feature the following amenities: stadium seating, plush, high-back rocking recliner seats, retractable cup holders, the latest digital surround sound systems, and customer service desks to provide extra assistance in the spacious lobby.

Hill International provided cost estimating services on this unique project. Hill reviewed ThEATery project scheme in order to add to the shopping experience, and conducted a feasibility study of cost, conceptual estimating and overall budget and construction constraints. Hill provided this model to eight other mall projects in the Northeast.



H-Power Waste to Energy Plant

Oahu, HI

Client:
ABB Resource
Recovery Systems

Service:
Claims Analysis

Total Project Value:
\$175,000,000

Completion Date:
1990



The H-POWER project is a 2,000 ton-per-day refuse derived fuel waste-to-energy plant in Ewa Beach, Hawaii. The project was developed by the Honolulu Resource Recovery Venture (HRRV), a joint venture of ABB Resource Recovery Systems and Amfac.

Hill was originally retained by HRRV to assess the validity of HRRV's approach in pursuing various delay related claims against the City and County of Honolulu resulting from a 21.3 month force majeure delay in receipt of air quality permits. The delay prevented HRRV from continuing with critical path construction activities. The permit also required the addition of a scrubber. An arbitration panel ruled that the delay was beyond the reasonable control of HRRV and that HRRV was entitled to a time extension and price adjustment.

Hill also assisted HRRV in developing strategies and approaches for determination of delay damages. Upon completion of this task, Hill's scope of work was increased to assist HRRV in the actual claim preparation. This included a detailed review and analysis of the additional project costs related to the delay and addition of the scrubber. Hill identified the applicable information required and developed documentation detailing the calculation of damages for the additional costs impacted by the force majeure delay and the addition of the scrubber.

Hill also analyzed the increase in plant start-up and operating costs due to the addition of plant scrubber. This entailed a detailed review of the plant staffing for the power block maintenance crews utilizing as-planned versus actual analyses.

Allegheny Lock & Dam 8 & 9

Kittanning, PA, USA



Client:
Voest-Alpine International
Corporation

Service:
Claims Analysis

Total Project Value:
\$17,000,000

Completion Date:
1991

VAIC contracted to manufacture, furnish and install four turbine generator units at two existing lock and dams on the Allegheny River in Armstrong County, Pennsylvania. The original owner, Sithe Energies, assigned the contract to Ebasco Constructors, who was responsible for the civil work.

Ebasco Constructors delayed VAIC's access to the site and required VAIC to accelerate to meet the original contract completion date. However, the Ebasco delays caused VAIC's work to occur during one of the most severe Decembers in recent history. Ebasco then stopped paying for overtime and refused to recognize the impacts of the winter work, stacking of trades and loss of learning curve. VAIC's subcontractor for installation (Lundeen's Inc.) refused to meet the required acceleration dates and was terminated. VAIC completed the project and filed an arbitration demand against Ebasco for approximately \$3.0 million.

Hill assisted in the preparation of the claim and the calculation of damages.

Armenergo State Enterprise- Project Preparation Facility

Yerevan, Armenia



Client:
Republic of Armenia

Service:
Management Consulting

Total Project Value:
\$14,300,000

Completion Date:
1998

Armenergo State Enterprise, the Armenian National Utility, received their first international loan from the World Bank to make critical repairs and renovations to the electrical distribution system. Hill International, due to our experience in Armenia and the Armenian Electricity System, was selected by Armenergo and the World Bank to provide project management training and procurement assistance to the newly formed Project Implementation Unit.

Hill's responsibilities as project manager included: project management training including cost accounting, scheduling, and maintenance; preparation of technical specifications and tender documents in accordance with World Bank guidelines; direct contracting, international shopping and ICB; preparation of withdrawal and replenishment applications, and maintenance of project accounts; and reporting.

Calvert Cliffs Nuclear Power Plant Steam Generator Replacement

Lusby, MD



Client:
Baltimore Gas & Electric

Service:
Project Management
Oversight

Total Project Value:
\$305,000,000

Completion Date:
2004

Baltimore Gas & Electric (BG&E) entered into an “Omnibus” contract with SGT, a joint venture of Duke Engineering Services and Morrison-Knudsen, Inc. (MK) to provide BG&E with the engineering, procurement, construction, technical specifications, and NRC licensing for the steam generator replacement on Units 1 and 2.

The steam generator replacement was scheduled for planned outages in the years 2002 and 2003, for Units 1 and 2 respectively. The duration of the scheduled outages was 75 calendar days. The project’s success depended on the efficient coordination of planning, engineering, procurement and manufacturing activities prior to the start of the outage as well as the close coordination of steam generator project activities with other plant operations (including health physics) during the outage.

Hill provided a high-level independent oversight review for the benefit of BG&E executives. The purpose of the oversight review included: monitoring and analyzing project progress in order to anticipate potential problem areas; looking for early “warning signs” that would develop during the project, but which would not be contemporaneously apparent to the parties; and providing BG&E with recommended action to resolve, avoid and/or mitigate problems which would jeopardize the project’s successful completion.

Perry Nuclear Power Plant

Cleveland, OH

Client:

Cleveland Electric
Illuminating Company

Service:

Claims Analysis
Project Management

Total Project Value:

\$9,000,000,000



Design and construction of the \$9 billion Perry Nuclear Power Plant in Perry, Ohio, required a massive and well managed effort of the part of its owner, the Cleveland Electric Illuminating Company, and its consultants.

Working side-by-side with the utility, Hill's on-site team monitored and assessed all aspects of the construction project. Hill helped Cleveland Electric schedule the huge project, evaluated construction bids and costs, evaluated and negotiated change orders and claims, and reviewed and revised construction contract documents to protect the utility's interests. The Hill team also conducted in-depth training for appropriate project personnel to help them spot and deal with problems before they affected the project's schedule or budget. In addition, Hill's professionals developed a construction claims procedures manual to help Cleveland Electric's staff better manage change orders and avoid claims on this and future projects.

Cochrane Woodwaste Cogeneration Project

Cochrane, Ontario, Canada

Client:
Northland Power

Service:
Claims Analysis

Total Project Value:
\$15,000,000

Completion Date:
1989



Northland ordered a turnkey 10MW wood-fired generating plant from Volcano. Original completion date was scheduled for January 1, 1989. Volcano's design and construction efforts were deficient, requiring substantial network and resulting in completion delays. On May 3, 1989, Volcano and Northland settled claims that were asserted by Volcano, and Northland assessed \$200,000 in liquidated damages against Volcano. In June 1989, Volcano declared bankruptcy.

The Surety (GCNA) took over and hired Gorf Contracting to complete the project. Project completion was expected in early 1990. Actions taken by the Surety, apparently to limit its expenditures, resulted in project completion being further delayed.

Hill was contacted to assess the direct damages resulting from deficient design and construction.

CCSU Energy Center

New Britain, CT

The CCSU Energy Center is a co-generation facility for Central Connecticut State University. The Center consists of three 1.25 MW gas fired reciprocation engines producing a total of 3.75 MW for campus use. The plant is also the main source of heating and domestic hot water for the entire campus. During the course of construction, disputes and claims arose concerning change orders, design and time extensions.

The firm was retained by the Attorney General's Office and the Department of Public Works to provide professional claims consulting services for all claims by Middlesex/All State, A Joint Venture (MAS) [the contractor] and by vanZelm Heywood & Shadford, Inc. (vZH&S) [the engineer of record] against the State. In addition, we provided professional claims analysis services for all claims and counterclaims by the State of Connecticut against MAS and vZH&S.

Client:

Connecticut Department
of Public Works

Service:

Claims Analysis

Total Project Value:

\$35,000,000

Completion Date:

2005

Cornell Medical Center CoGeneration Plan

New York, NY

Client:
Adria Industrial Piping Ltd.

Service:
Estimating

Completion Date:
2007



Hill provided mechanical estimating services for the construction of a new cogeneration plant at the Weill Cornell Medical College, located at New York-Presbyterian Hospital in Manhattan. Hill's highly detailed estimate for the 7,200-kilowatt, gas turbine plant included costs for high-pressure gas piping, boiler feed piping, loop oil piping, chill water supply and return piping, condensed water piping, and all drains, vents and waste piping. Hill also provided expert witness services.

Croatia Community Infrastructure Reconstruction Program

Croatia



Client:
Louis Berger Group,
Inc, The

Service:
Estimating
Project Management

Total Project Value:
\$22,000,000

Completion Date:
2003

The USAID funded Community Infrastructure Rehabilitation Program (CIRP) provides a mechanism for undertaking small and medium-scale rehabilitation projects throughout the war-affected areas of Croatia, rural and urban, municipality and village. The CIRP Project goal is to implement approximately 60 to 70 small and medium scale individual subprojects under an initial project budget of approximately \$11 million. This number was subsequently increased to over \$20 million. The CIRP was scheduled to be implemented over a period of 24 months, and was subsequently increased to 36.

The individual infrastructure subprojects for rehabilitation are identified by USAID and are being constructed by local public utility personnel and/or by subcontracts. The subprojects include electric distribution systems; water supply systems; sanitary sewers and solid waste disposal systems; local roads and streets; bridges; public schools; public health clinics; and other public buildings. The average cost of small-scale subprojects is approximately \$200,000, and the average cost of medium-scale subprojects generally does not exceed \$1 million. The general principle for selecting subprojects is to select those which contribute most directly to encouraging the return of refugees or displaced persons through the restoration of normal life and economic recovery, including generation of employment for the local people.

Croatia Community Infrastructure Reconstruction Program

Hill International, in joint venture with the Louis Berger Group, is providing the design, engineering and construction management for the CIRP projects. The Hill/Berger team assesses the feasibility of each individual infrastructure project, prepares the engineering and design plans, prepares the tender documents, and manages the implementation of construction of the selected projects. Hill/Berger works in partnership with USAID, GOC ministries, municipal governments and local communities, who provide the majority of ideas for project proposals. From time to time non-governmental organizations (NGO) and other donors also identify on a case by case basis projects that need to be implemented by the CIRP.

MERC Waste-to-Energy Plant

Biddeford, ME, USA

The Maine Energy Recovery Company's Waste-to-Energy Plant produces and burns refuse-derived fuel produced from municipal solid waste. The capacity of the plant is 607 tons per day.

Hill International and Gibbs & Hill were retained by counsel for the General Electric Company to review and assess the adequacy of the design parameters for the plant to determine whether those parameters were consistent with industry standards at the time into which the contract was entered. In addition, Hill and Gibbs & Hill were requested to review certain major design problems, including the bag house, intake structure, processing equipment, trommel, conveyors and the boiler.

Finally, Hill was asked to prepare a survey of North American plants producing and burning refuse-derived fuel from municipal waste. The purpose of this study was to provide a baseline against which to evaluate the design and performance of the MERC plant. The industry review identified 38 refuse-derived fuel plants completed or under construction in the United States and Canada. From this total, six comparable plants were selected and reviewed for comparison to the MERC facility.

Client:
General Electric Company

Service:
Building Assessment Report
Claims Analysis

Completion Date:
1990

Guayama Carbon Thermoelectric Plant

Guayama, PR

Client:
Alvarado, Vazquez,
Fernandez

Service:
Delay Analysis

Completion Date:
Ongoing



The Guayama Carbon Thermoelectric Plant (Project) consists of a two (2) unit coal-fired circulating fluidized bed power plant constructed in the city of Guayama, Puerto Rico. Alstom Power Inc./Combustion Engineering Inc. (Alstom) was responsible for the design and construction of two boilers together with their piping and heat recovery systems and complete air pollution control systems. JR Insulation Sales and Service of Ponce, PR (JR), as a subcontractor to Alstom, was responsible for the installation of insulation. The Project ultimately was delivered late and experienced cost overruns.

Hill International Inc. (Hill) was retained by the MAPFRE PRAICO Insurance Company (PRAICO), JR's surety, who is financing the litigation and defense on behalf of the principal. Hill submitted an expert report evaluating JR's entitlement to an additional \$12,614,000 due to unanticipated interferences and delay over 450 days.

Hanford Spent Nuclear Fuel Plant

Richland, WA



Client:
United States
Department of Energy

Service:
CPM Scheduling
Document Review

Total Project Value:
\$1,400,000,000

Completion Date:
2000

Hill International was retained to provide review of a troubled, \$2-billion Spent Nuclear Fuels (SNF) Project. Hill performed the SNF Project Baseline for reasonableness of its assumptions and feasibility for implementation.

Hempstead Resource Recovery Facility

Hempstead, NY, USA



Client:

American Ref-Fuel Company

Service:

Claims Analysis
Management Consulting

Completion Date:

1990

Quote:

“Hill has been very helpful to us in analyzing our construction claims and assisting us in putting them in the best light when we negotiate with our customers.”

D. Brown-Vice President of Law and General Council,
American Ref-Fuel

American Ref-Fuel contracted with the Town of Hempstead, New York in 1986 to design and construct a 2,250-ton-per-day, waste-to-energy facility at the site of the existing resource recovery facility. The existing plant had been idle since 1980 due to operating problems with the “wet process” incinerator. The plant’s feedstock is municipal solid waste in the as-discarded form from the Town of Hempstead area. Ferrous recovery is provided.

Deutsche Babcock Anlagen provided the “chute to stack” proprietary package for the facility, which included the combustion of refuse, generation of steam, clean-up of flue gas, and other related processes. One 72.3-megawatt automatic extracting steam turbine generator unit provides electricity both to the plant and to the Long Island Lighting Company.

Hill was retained by American Ref-Fuel to conduct a construction and management survey in 1988. The plant was scheduled to be in commercial operation by August 1989, but was encountering delays and cost overruns.

Hill sent a project task force to the site to review the project status and projected completion dates of the various construction contracts and advise American Ref-Fuel’s management of the likelihood of meeting current projected completion dates and budgets.

The areas in which the task force reported on were schedule, cost (and current procedures in place to monitor these), contract administration, labor relations, project communications and coordination and effectiveness of the management team at site. Hill's report to American Ref-Fuel's management was confidential.

Subsequently, Hill was retained to advise the project management team on the potential and likely success of claims by the major contractors. Hill assisted in the disposition of the several claims which were submitted including a claims by the boiler erection and power piping contractors.

At a later date, Hill was asked to assist American Ref-Fuel in preparing a claim against the Town of Hempstead for uncontrollable circumstances relating to bomb threats, strikes, and inclement weather impacts.

Hrasdan Power Plant Inventory

Yerevan, Armenia

Client:
USAID

Service:
Program Management
Project Management

Total Project Value:
\$91,000

Completion Date:
1995



Hill International was chosen to design, program and install a modern computerized inventory management system for the Hrasdan Power Plant, a 4 x 200 MW power plant in the Republic of Armenia. The work was performed under a USAID program through USAID's umbrella contract with Burns & Roe Enterprises.

The project consisted of the following elements:

- Training of personnel in modern materials management procedures.
- Procurement of appropriate materials handling equipment.
- Preparing and implementing a re-warehousing plan.
- Design of a custom computerized warehousing system.
- Testing and installation of the computerized warehousing system.
- Training of plant personnel in the use of the computerized system.

Hrasdan Power Plant, Unit No. 5

Yerevan, Armenia



Client:
Republic of Armenia

Service:
Project Management

Total Project Value:
\$400,000,000

Completion Date:
2002

Quote:
"I would like to commend Hill for the outstanding performance of your resident expatriate and local team. Over the last seven years your team has shown exceptional dedication and quality of service." Samvel Yeritsian-Director PIU, Republic Of Armenia

Hill International was selected to provide technical assistance for the first ever international program management contract in Armenia. Hill provided project management and general advisory services for the European Bank for Reconstruction and Development (EBRD) co-funded Hrasdan Power Plant project, the Republic's first major project since achieving independence in 1991. The scope of the project consists of the construction, commissioning and startup of a partially completed supercritical 300 MW dual-fired power plant of Russian design. The project is the first instance of international financing of a semi-completed facility of this size and magnitude.

The completed plant has drastically improved Armenia's lagging electric power capacity. Before its completion, the republic's nearly 3.7 million people often were without consistent, reliable power. The Hrasdan plant both improved power service and ended reliance on the aging, adjacent Medzamor Nuclear Power Plant.

Hill's responsibilities included:

- International tender document preparation
- Procurement - evaluation, award, administration and closeout
- Technical assistance to the Ministry of Energy and Fuel (MEF) in the

privatization process of the generating units

- Management of construction of the Soviet-designed 300MW power plant, Gas Storage facilities, Gas Compression Station, 220 KV Transmission Line and other related Infrastructure.
- Legal framework review, asset evaluation, tender preparation and coordination with the IBRD and EU funding agencies for privatization support.
- Preparing commercial and technical tender documentation and overseeing the procurement of services from the international marketplace.
- Assisting the MEF in the evaluation of bids and recommending contract award.
- Providing on-site management of construction and commissioning.
- Developing and implementing a quality assurance program.
- Training local staff and introducing western means and methods of project management.
- Bringing state-of-the-art management tools to the Armenian construction industry.
- Preparing contracts, disbursement applications and invoices in accordance with EBRD regulations

In addition to the above, since 1997, Hill has also been working with EBRD, the MEF and the Hrasdan Plant to develop means and options for bringing additional financing to the project with the ultimate goal of privatizing the unit.

Indian Point Nuclear Plant

Cortlandt, NY

Client:

Raymond G. Kuntz
Law Offices

Service:

Building Assessment
Reports
Litigation

Completion Date:

1990



Counsel for the Town of Cortlandt, New York engaged Hill International to provide consulting services in connection with a tax appeal in which Consolidated Edison contested the assessed value of the Indian Point Unit No. 2 Nuclear Power Plant.

In support of the Town, Hill inspected the facility and reviewed various records reflecting the actual construction cost of the facility. The analysis included the allocation of common costs among the three Indian Point units, two of which were owned by Con Ed and one of which is owned by the New York State Power Authority.

Braddan Energy from Waste Facility

Braddan, Isle of Man, UK



Client:
Isle of Man Government

Service:
Claims Analysis

Total Project Value:
\$6,000,000

Quote:
"It is clear that Knowles drove forward an equitable solution, in difficult circumstances, to a complex set of issues to the satisfaction of the Client."
Alan Blain, Capital Projects Co-ordinator for Government

The Braddan Energy from Waste facility is a power station that produces electricity using household waste as the fuel instead of using fossil fuels such as coal, gas and oil. The facility treats 60,000 tons of municipal waste in the primary incinerator, and up to 5,000 tons of clinical, animal, and oil waste in the secondary incinerator. The Department of Local Government and the Environment awarded the contract to SITA for a facility capable of dealing with islands non-recyclable waste and generating 10% of its electricity needs.

At end of construction, the Department was presented with a SITA claim in respect to adverse ground conditions, coupled with an application for a time extension of 5 months (licensee had previously been awarded two Adjudicator's Decisions on principal in its favor). The Department commissioned the firm to review the claim and assess entitlement. The firm's analysis resulted in an entitlement of 8.5% of that originally sought.

Kalaeloa Cogeneration Project

Ewa Beach, HI

Client:
ABB Power Generation, Inc.

Service:
Claims Analysis



Hill was requested to perform a review of the impacts on cost and schedule of the socket weld issues. Hill reviewed project records and procedures, attended meetings, and provided a preliminary impact analysis for the project resulting from CBI/Deltek's performance when installing socket welds for the subject project piping.

Hill reviewed the procedures, codes and standards, and production records to measure the impacts suffered by ABB as a result of CBI/Deltek's failure to perform in accordance with ASME standards. Hill also evaluated ABB's performance with respect to the socket weld repairs and inspections including its meeting with code officials.

Hill also participated in preliminary meetings to discuss settlement procedures, back charges and claims.

Kirkwood Hydro Engineering Plant

Groveland, CA



Client:
City and County of
San Francisco

Service:
Claims Analysis

Total Project Value:
\$10,000,000

Completion Date:
1990

Hill International was retained to evaluate the claims and advise the Utilities Engineering Bureau (UEB), City of San Francisco, of its liability to the contractor and to assess the City's rights to counter claim against the design engineer and equipment supplier for a series of claims involving the Kirkwood Power Station.

In November, 1985, Hetch Hetchy Water & Power began construction of a third hydroelectric generator at its Kirkwood Power Station. The prime contract required the new unit be functional by April 1, 1987 and all construction be completed by October 1, 1987. There was a bonus of \$15,000/day for each day prior to April 1, 1987 that the unit was operable available to the contractor. Throughout construction there were numerous design changes and defects with the owner-furnished turbine/generator unit. The contractor did not achieve the April 1 operation date and did not complete construction until Summer, 1988.

The contractor and its subs filed numerous claims for extra work, delay, inefficiency and entitlement to the bonus.

The UEB, acting for the owner, through the City of San Francisco's attorney's office, hired Hill to provide claims analysis. Hill was also retained to assist with negotiations and present a training course to the City personnel on claims management, utilizing the Kirkwood project as a case study.

Los Angeles Department of Water and Power Audits

Los Angeles, CA

Client:
GCAP Services

Service:
Audits
CPM Scheduling

Total Project Value:
\$1,000,000

Completion Date:
2007



The City of Los Angeles Department of Water and Power conducted a performance audit of four contract groups initiated by the Board of Water and Power Commissioners. The Department regularly enters into professional services and construction contracts to supplement its resources and periodically conducts performance audits as a standard business procedure.

The objectives of the Department's performance audits were to assess the four groupings of Department contracts for effectiveness and results; economy; efficiency; internal control and direction of contract; compliance with federal, state, and local laws and regulations, City and Board policies, and Mayoral Directives; and accountability.

The performance audits included assessments of the following contracts:

- Group 1. - Equipment Rental
- Group 2. - IT Services/Software
- Group 3. - Professional Services
- Group 4. - Construction

The Department selected GCAP Services as the consultant to provide assistance in auditing the performance of various contracts and identify and propose alternative contracting practices for the Department to achieve maximum value from its service contracts. GCAP, as the Prime consultant, assisted the Department with performance audits and provided an unbiased, objective analysis and recommendations.

The project's scope of work included review of contract terms and language; review and assessment of Department management of the projects; review of contractor project performance; research of best practices; and reports detailing findings, significant issues, and recommendations for improvements, maximizing Department value, and identifying alternative contracting practices.

Hill International provided scheduling and coordination services for GCAP's team, in addition to contract auditing. Hill participated in performing reviews and assessments of Department management of all projects identified in the audits to evaluate whether Department controls and procedures were adequate with respect to the management of engineering, procurement, and cost controls. Hill also reviewed performance of all contracts selected and identified in the audits to evaluate and assess whether the original provisions approved by the Board for Department Agreements were followed. Additionally, Hill participated in kick-off and other meetings, site visits, and developed required reports and presentations as needed.

Melvin Price Lock & Dam

Alton, IL



Client:
United States Army
Corps of Engineers

Service:
Claims Analysis
CPM Scheduling

Total Project Value:
\$800,000,000

Completion Date:
1991

In 1979, the U.S. Army Corps of Engineers, St. Louis District, began construction of the new Alton Lock and Dam No 26, now called the Melvin Price Lock and Dam, on the Mississippi River near Alton Illinois. The new dam replaced the existing one, which had deteriorated and had inadequate locking capacity. The new structure consists of more than one million tons of concrete and steel and covers an area of more than three million square feet.

Construction is proceeding in three stages. The first stage consists of cutting back the shoreline, placing stone protection and constructing a cofferdam and 6 1/2 gatebays. The second stage consists of construction of a second cofferdam, plus an additional 2 1/2 gatebays. The third stage includes completion of the work on the gatebays and the provision of a closure structure to the Illinois shore. Project completion is scheduled for 1990.

Hill International was retained to support the COE's overall claims management efforts when excessive contract modifications had increased the contract amount by nearly \$17 million and caused a time extension of more than a year. In addition, claims were filed by the contractor totaling approximately \$70 million. Hill has provided extensive schedule services, including development, analysis and monitoring of the project schedules.

Hill's contract was renewed to accommodate the on-going project, originally scheduled for 1990 completion. Under the new contract Hill provided a variety of project management services. Hill was involved in analyzing contractor's network-based schedules (CPM) and contractor claims which may be filed against the government.

Hill provided project controls services and claims analysis for this project over a five-year period. Hill performed analysis of contractor network based schedules and contractor claims.

Hill International was retained when excessive contract modifications had increased the contract amount by nearly \$17 million for one of the contracts and caused a time extension of more than a year. In addition, claims were filed by the contractor totaling approximately \$70 million. Hill assisted the COE in evaluating this claim as well as on follow-on contracts.

Hill has provided extensive schedule services, including review, analysis and monitoring of the project schedules. These services supported the COE's overall claims management efforts on this project.

The project was for construction of the New Alton Lock and Dam No. 26 on the Mississippi River, near Alton, Illinois. The project was designed to replace the existing dam, which had deteriorated and had inadequate locking capacity. The new structure consists of more than one million tons of concrete and steel and covers an area of more than three million square feet.

Construction was planned for three stages. The first stage consisted of cutting back the shoreline, placing stone protection, and constructing a cofferdam and 6-1/2 gatebays. The second stage consisted of a second cofferdam plus an additional 2-1/2 gatebays. The third stage included completion of the work on the gatebays and the provision of a closure structure to the Illinois shore. Project completion, scheduled for 1990, was substantially delayed based on schedule and cost overruns on which Hill was active in reviewing and mitigating.

Northern India Hydro-Electric Dam

Himachal Pradesh, India

Client:
Nathpa Jhakri Joint Venture

Service:
Arbitration

Completion Date:
2007



The 1,500-megawatt Nathpa Jhakri Hydro-Electric project, located on the Sutlej River, is the largest underground hydro-electric power project in India. The Nathpa Jhakri Joint Venture (NJJV), a joint venture of the Italian tunneling contractor Impregilo S.p.A. and Hindustan Construction Company, Ltd., had a \$188 million (USD) contract for construction of the head race tunnel and surge shaft. During construction, NJJV encountered differing site conditions, illegal strikes, power interruptions, access delays and other owner-caused delays, and received a 25-month time extension. NJJV requested additional time extensions, compensation for delays and acceleration costs in Dispute Review Board proceedings and Additional Dispute Review Board hearings. NJJV received favorable awards, but the owner appealed to Arbitration.

Hill was retained to assist in the preparation and presentation of the International arbitration. Specifically, Hill performed an analysis of the delays, helped to prepare for and present findings in the arbitration hearings, and provided expert testimony at subsequent hearings.

Pendleton Solar Array

Pendleton, OR, United States

Client:
LRS Architects

Service:
Estimating

Completion Date:
2009



Hill International will provide a cost estimate to assist in the final decision of a carport solar array for the new Pendleton State Office Building #202. The decision for the size of the array is based on an 8% offset from an established baseline. Hill is providing the conceptual/schematic estimate for budgetary purposes.

Penuelas Power Project

Ponce, Puerto Rico



Client:
Bracewell & Patterson, LLP

Service:
Claims Analysis
Delay Analysis
Document Review
Litigation
Technical Support

Total Project Value:
\$450,000,000

Completion Date:
2000

Enron Engineering & Construction Corporation (EECC) is responsible for the construction of a 507 MW net cogeneration facility located in Puerto Guayanella, Puerto Rico. The plant is a combined cycle power plant with two combustion turbines fired by LNG, LPG, and distillate oil (back up) fuel. The two HRSG's provide steam flow to an extraction/condensing axial exhaust steam turbine generator and to a thermal desalination plant. The desalination plant will produce 3 million gallons per day of potable drinking water.

The power plant was completed over 6 months later than planned. EECC thereby lost an early completion bonus and was subjected to liquidated damages. Initially engineering delays in producing the foundation, piping and hangers, and electrical designs occurred. After the constructor accelerated the effort to complete the plant, during start-up and commissioning, a series of major system failures resulted in the delayed completion and acceptance date.

Hill is providing claims management and analysis for the project. Hill is evaluating design defects, other delays including Force Majeure and vendor or construction delays and their impact to completion. Several of the design flaws include failure to comply with LPG safety codes and regulations, relocation of instrumentation and controls, no provision for steam injection

to selective catalytic reduction system, improper drains and venting, incorrect material selection, and numerous other errors and omissions.

Hill performed a preliminary technical analysis and a schedule analysis to determine the affect of the failures on the critical path. Hill is also providing litigation support services to EECC's outside counsel including document control and assistance in developing strategy. Hill will be conducting a more detailed analysis as the dispute resolution process continues.

Burlington Unit No. 10 Rehabilitation

Burlington, NJ



Client:
PSE&G Power LLC

Service:
CPM Scheduling
Project Management
Project Management
Oversight

Total Project Value:
\$145,000,000

Completion Date:
1992

Public Service Electric & Gas Company (PSEG) engaged Hill International, Inc. to conduct a project management study in connection with this major facility upgrading and equipment replacement project. Hill provided an independent objective assessment of the project management organization, resources, systems procedures and practices to assure PSEG that its project management functions were being performed in such a way that the time, cost and quality objectives of the project would be attained. PSEG's project delivery strategy was based on a combination of in-house and consulting engineering, an owner's CM team, and the use of fast-tracking and multiple prime lump sum scope bid construction contracts.

A key functional area investigated as part of this study was the project control function. The project control function includes schedule, budget and cost control, estimating, document control and claims avoidance. The assessment resulted in major changes to the comprehensive scheduling specifications and scheduling procedures to enhance PSE&G's ability to enforce the schedule and monitor progress utilizing the Primavera Finest Hour scheduling system. Similar recommendations were offered and implemented for the other areas of project control.

Other project management functions evaluated by Hill include engineering, contract administration, management of change orders and claims, quality, safety and start-up. A comprehensive written report of findings and recommendations was provided to PSEG.

As a result of the findings and recommendations of Hill, four scheduling and project control seminars and four claims avoidance seminars were conducted for the project staff from three different large-scale capital projects being undertaken by PSEG.

PSEG Power Continuing Service

Newark, NJ

Due to post-deregulation of the power industry, PSEG Power had several major capital projects underway which were not progressing in a satisfactory manner to achieve the projects' cost and schedule objectives. Hill International assessed PSEG's capital projects organizational structure, delivery systems and procedures, and personnel roles and responsibilities. A review of PSEG's project delivery system included both internal support organizations and external consultants and suppliers. Recommendations for future improvement were aimed at optimizing PSEG's project delivery performance in a deregulated, competitive environment.

As part of Hill's review process, over 40 PSEG Power personnel and contractors were interviewed. A major focus area was the structure of the capital projects organization, including specific responsibilities of purchasing, engineering, project controls, and site construction management. Project Controls processes that were reviewed included methods for identifying and mitigating schedule and cost overrun scenarios. Work process reviews included workflow and approval procedures.

The study objective was to develop a project delivery program that would consistently deliver maximum success with minimal risk. Hill delivered a detailed study that addressed the above topics, defined strengths and weaknesses of current systems, and provided recommendations to assist the client in developing strategies for improvement. Additional services provided by Hill to PSEG Power have included Project Management Oversight (PMO) and work process improvement of the Change Management process.

Client:
PSEG Power L.L.C.

Service:
Management Consulting
Estimating
Project Management
Oversight

Total Project Value:
\$1,800,000,000

Completion Date:
2009

Hudson Generating Station

Jersey City, NJ



Client:
Public Service
Electric & Gas

Service:
Claims Analysis

Total Project Value:
\$6,800,000

Completion Date:
1990

Courter & Company was one of a number of contractors engaged by PSE&G to do repair and replacement work at Hudson Generating Station during a scheduled outage at the fossil fuel generating plant.

Courter's work encompassed replacement of two high pressure and two low pressure feedwater heaters in the existing generating station, stop valves and the various piping and connections to the existing facilities, and the reinforcement of an existing boiler. After completing the work, Courter submitted a claim for additional payments due to extra work, acceleration to meet the outage schedule, and production inefficiencies, citing numerous issues including varying site conditions and design errors and omissions.

Hill was engaged by PSE&G to evaluate the merit of the claim and determine the extent of damages. Hill evaluated each of the individual claim items, and for those for which merit and/or potential exposure existed, determined an anticipated settlement range. Hill also performed an audit of the Contractor's records to determine the extent of Courter's losses on the project. Hill's findings were discussed at great length with PSE&G. Armed with this information, PSE&G met and negotiated a settlement satisfactory to both parties.

PSEG Power Monitoring & Reporting Methods

Newark, New Jersey, USA

Client:
PSEG Power L.L.C.

Service:
Management Consulting

Total Project Value:
\$1,800,000,000

Completion Date:
2002

Hill was tasked with evaluating PSEG Power organization and management in the execution of power generation projects. The Hill team conducted over 40 interviews of PSEG Power personnel and contractors and derived a large amount of information which was summarized in a written report. Hill identified what was regarded as industry practice, and commented on the findings relative to PSEG Power practices. Lastly, where applicable, we offered recommendations on changes that, in our opinion, should be implemented. Hill prepared a list of “Major Recommendations” which we believed need action for mitigating further risk and cost overruns on existing execution phase projects.

The areas of study were these:

- Pre-Project Planning
- Project Scope Definition
- Project Execution Planning
- Project Concept Review And Approval
- Project Execution
- Procedures and Standards
- Project Management Tools
- Personnel Qualifications
- Business Environment
- Core Competencies
- Staffing
- Organization
- Mission / Strategic Plan
- Roles and Responsibilities
- Matrix Issues
- Communication / Coordination

Projects included in this study were:

- Bergen 2x1 7FA @ 535MW
- Linden 2x2x1 7FA @ 1186MW
- Waterford Indiana 3x1 7FA @ 750MW
- Lawrenceburg Ohio 2x2x1 @ 1070MW

PSEG Power Continuing Service and PSEG Power Monitoring and Reporting Methods

Newark, NJ



Client:
PSEG Power L.L.C.

Services:
Staff Augmentation
Estimating
Management Consulting
Project Management
Oversight

Completion Date:
2007

Due to post-deregulation of the power industry, PSEG Power had several major capital projects underway which were not progressing in a satisfactory manner to achieve the projects' cost and schedule objectives. Hill International assessed PSEG Power's capital projects organizational structure, delivery systems and procedures, and personnel roles and responsibilities. A review of PSEG Power's project delivery system included both internal support organizations and external consultants and suppliers. Recommendations for future improvement were aimed at optimizing PSEG Power's project delivery performance in a deregulated, competitive environment.

As part of Hill's review process, over 40 PSEG Power personnel and contractors were interviewed. A major focus area was the structure of the capital projects organization, including specific responsibilities of purchasing, engineering, project controls, and site construction management. Project Controls processes that were reviewed included methods for identifying and mitigating schedule and cost overrun scenarios. Work process reviews included workflow and approval procedures.

The study objective was to develop a project delivery program that would consistently deliver maximum success with minimal risk. Hill delivered a detailed study that addressed the above topics, defined strengths and weaknesses of current systems, and provided recommendations to assist

the client in developing strategies for improvement. Additional services provided by Hill to PSEG Power have included Project Management Oversight (PMO) and work process improvement of the Change Management process.

Assignments included in this project are:

- **Bergen Project** - 550 MW Power Plant is located in Bergen New Jersey and consists of 2x1 GE 7FA Gas Turbines, Foster Wheeler HRSGs with duct firing, GE D11 225 MW Steam Turbine, Hamon Hybrid Cooling Tower, providing power through step up transformers at 500kv to the PJM grid. Commercial Operation achieved June, 2001 on a 24 month overall schedule. Engineering by DFD and Construction Management by PSEG Power. Final cost was 319 mm dollars. Used the Alliance Contracting, T&M method based upon target manhours. This was a union site with construction work rules based upon the National Maintenance Agreement.
- **Linden Project** -1220 MW Power Plant is located in Linden New Jersey and consists of two 2x1 GE 7FA Gas turbines, four duct fired FW HRSGs, two GE Frame D11 250 MW Steam Turbines, Hamon Hybrid Cooling Tower, providing power to the PJM and local grids at 138 kv and 345 kv. Commercial operation was planned for June 2003 and had been deferred to June 2005. Original schedule was 24 months. Current cost estimate is 787 mm dollars. Engineering by DFD, Construction Management originally by DFD, now by PSEG Power. Project was initiated on the Alliance Contracting systems based upon T&M and target manhours. Bids are now being solicited to convert the project to multiple lump sum contacts. This is a union site with construction work rules based upon the National Maintenance Agreement.
- **Mercer Project** - This project is located at Mercer Generating Plant in Trenton, NJ and involves the addition of Selective Catalytic Reduction, (SCR), Units on each 350 MW coal fired unit at the plant. The purpose of the SCR units is to reduce the Oxides of Nitrogen down to acceptable levels. PSEG Power is currently under a Consent Order to have Unit 2 completed by March 4, 2004. The project schedules are for completion of Unit 2 by March 4, 2004 and Unit 1 by April 1, 2004. The project is being managed by Lurgi US, under and EPC contract to PSEG Power. Current estimate is 109.5 mm dollars. The work is being handled on a lump sum contracted basis with Hake as the general contractor. Construction rules are under the National Maintenance Agreement.
- **Waterford Project** - 850 MW Power Plant in Waterford Ohio consisting of 3x1 GE 7FA Gas Turbines, 3 Nooter Eriksen HRSGs, Hamon Cooling Tower, providing power at 500KV to the American Electric Power Grid. Commercial Operation was planned for May 31, 2003 and was achieved on June 28, 2003. The original schedule was 24 months. Current cost estimated is 485 mm dollars. The entire project is being managed by DFD under an EPC contract. This is a union site with construction work rules based upon local work rules.
- **Lawrenceburg Project** -1190 MW Power Plant located in Lawrenceburg Indiana consisting of two 2x1 GE 7FA Gas turbines, four duct fired FW HRSGs, two GE Frame D11 225 MW Steam Turbines, Hamon Cooling Tower, providing power to the American Electric Power Grid at 500kv.

Commercial operation was planned for June 2003 and had been deferred to Nov. 30, 2003. Original schedule was 24 months. Current cost estimate is 787 mm dollars. The project is being managed under an EPC contract by DFD. This is a union site with construction work rules based upon local agreements.

- **Bridgeport Unit 3 BET Project** - The project consisted of the addition of a PJFF Bag House, Booster Fans, Activated Carbon Injection System together with extension of the DCS System, a new ash collection system and silo and new station service transformer on Bridgeport Unit 3, 350 MW PC fired plant to meet air quality Consent Decree mandated effective July 1, 2008 for dust and mercury removal from the flue gas. Shaw, Stone & Webster was the EPC contractor, Dust Collection was by Wheelabrator, Fans by Howden. Hill work consisted of analysis of the Shaw schedule and commodities, report to PSEG Power on the possibility of Shaw to meet schedule, development of a Lessons Learned Report for use on future projects.
- **Mercer 1 & 2 BET Project** - The project consists of adding a PJFF Bag House, Spray Dryer Absorbers, Powdered Activated Carbon system, together with an ash collection system, booster fans, and extension of the DCS system with new cabinets on both Units 1 and Unit 2, each nominal 300MW PC fired power plants with the objective of meeting the Consent Decree requirements of Dec. 31, 2008 for the PJFFs and PAC, and Dec. 31, 2010 for the SDA. The PJFF, PAC, and SDA are being supplied by Alstom. The booster fans are being supplied by Howden. The SCR's were previously supplied by LLNA and were placed into operation on January 1, 2007 to meet Consent Decree Requirement. The project also includes the replacement of the Main Step-Up Transformers for both Units. Shaw Stone & Webster has been hired as the EPC contractor with Worley Parsons and the Owners Engineer. Hill is providing project oversight services such as schedule analysis and general management advice.
- **Hudson 2 BET Project** - The project consists of adding a PJFF Bag House, Spray Dryer Absorbers, Powdered Activated Carbon system, and Selective Catalytic Reduction System (SCR) together with an ash collection system, booster fans, and extension of the DCS system with new cabinets on Hudson Unit 3, 650MW nominal PC fired supercritical power plant with the objective of meeting the Consent Decree requirements of Dec. 31, 2010 for the PJFFs, PAC, SDA, and SCR. The PJFF, PAC, and SDA are being supplied by Alstom. The SCR is being supplied by Hitachi. Booster Fans are being supplied by TLT-Babcock. Shaw Stone & Webster was originally hired as the E/CM contractor with Worley Parsons and the Owners Engineer. S&W Shaw was replaced by URS on April 14, 2009. Hill is providing project oversight services such as schedule analysis and general management advice.

Oyster Creek Nuclear Power Plant

Lacey Township, NJ

Client:
PSE&G Power LLC

Service:
CPM Scheduling



Hill was retained by Public Service Electric & Gas to prepare and update CPM schedules for the engineering, procurement, construction, preoperative testing and startup phases of this 900 MW nuclear plant (B&W and NSSS). This included training seminars for the Owner's personnel and for the A/E's engineering and CPM personnel, and guidance of the A/E in the development of man-loaded engineering networks which were integrated with Hill man-loaded construction networks to produce a complete master schedule based on the PSAR general arrangement drawings and flow diagrams. Following relocation of the plant to Harrisburg, Pennsylvania, Hill guided the Engineer in the expansion of the man-loaded construction networks which were related to the estimate and classification of accounts. Regular monthly updating followed, including site visit meetings with periodic manpower leveling. Cost reports were produced from the CPM schedule, including budgeted versus forecasted labor and material, as were cash flow forecasts, which considered retainage and lag in payments between delivery and payment dates.

The Owner purchased Hill proprietary computer software (Management Control System Mark I) and assumed computer schedule updates with its newly formed project control group which was trained by Hill. Subsequently, the Engineer purchased an upgraded version of MCS (Mark II) for use on all of its power industry projects.

Puget Sound Energy - Systems Consulting Services

Bellevue, WA



Client:
Puget Sound Energy

Service:
Estimating
Management Consulting
Project Controls
Training/Seminars

Total Project Value:
\$2,678,218

Completion Date:
Ongoing

Hill International is the prime consultant providing project controls systems consulting services to Puget Sound Energy (PSE) for the installation of a company-wide project controls system for tracking the cost and schedule on all of their capital projects. In 2003, Hill began working with PSE to research and review project controls software that would not only meet their current needs, but would allow for expansion of the system for future projects. PSE chose Expedition P3ec and WinEst software for cost and schedule control and WinEst for its standard cost estimating software. The overall project has the following main tasks:

Task 1 - Cost Estimating

- Implement cost estimating system
- Provide training for PSE staff
- Develop cost estimating procedures and load existing data into top down facility data

Task 2 - Schedule Database Configuration

- Help PSE with P3e software installation
- Develop P3e coding structure

- Convert existing schedules and cost load project schedules; develop schedule procedures
- Provide support in integrating with SAP environment

Task 3 - Change Management Configuration

- Configure change control system and align with financial system
- Develop forms & reports for system
- Develop change procedures
- Provide support in integrating with SAP environment

Task 4 – Project Management Plan (PMP) Assistance

- Assist with PMP development; help develop specific topics
- Make recommendations regarding the PSE management processes
- Develop ancillary detailed procedures as required

Task 5 - Project Control Resources

- Provide initial schedule assistance and conversion
- Provide baseline documents for cost, schedule, and scope as directed
- Provide WBS assistance

Additionally, Hill designed and configured an intranet for real-time tracking of projects for PSE's project managers. Once the existing P3 version 3.1 schedules were converted to P3ec, PSE's project managers assumed responsibility for maintaining the cost and schedule information. At each month end, Hill oversees the input of the current status by the project managers and coordinates the completion of the update and the production of monthly reports.

San Diego Gas & Electric Heber Project

Heber, CA

Client:
San Diego Gas & Electric Co

Service:
Construction Management

Total Project Value:
\$188,000,000

Completion Date:
1986



Hill International/Dravo provided construction management services for the Heber Geothermal Demonstration Project (65MW binary cycle) for San Diego Gas & Electric Company. A consortium consisting of SDG&E, DOE, EPRI, DWR, IID, the State of California, and Southern California Edison Company funded the project. This project cost approximately \$188 million and is the world's largest binary-cycle geothermal plant.

In addition to construction management, Hill/Dravo provided vendor surveillance of owner-furnished equipment, site services, and cost engineering services.

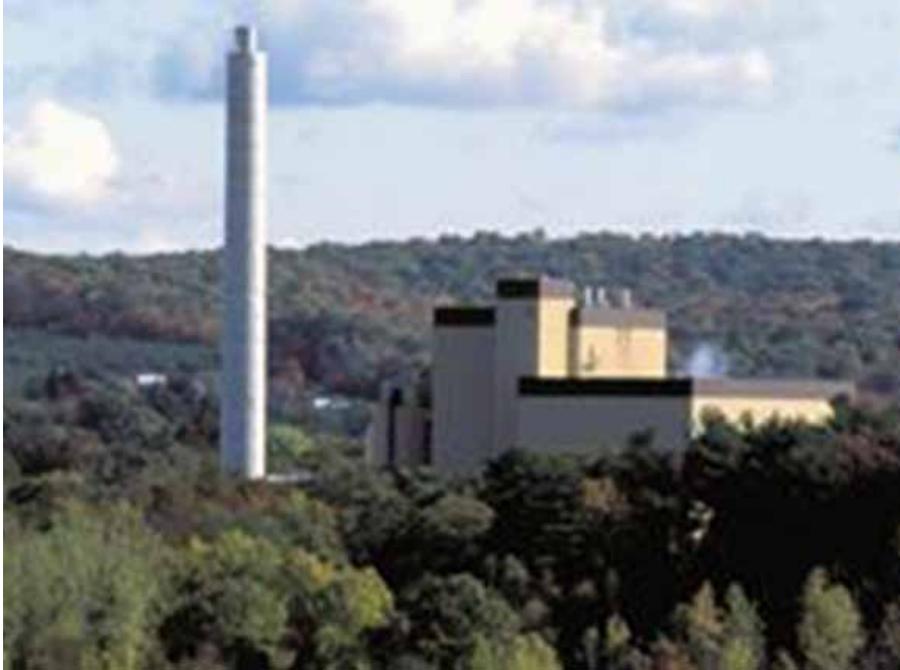
Southeast Connecticut Resource Recovery Facility

Preston, CT

Client:
American Ref-Fuel

Service:
Construction Management

Completion Date:
1991



The Southeastern Connecticut Waste-To-Energy Facility is a 600 ton per day waste-to-energy facility utilizing the roller grate mass burning technology developed by Deutsche Babcock Ahlagen (DBA). Hill was engaged by American Ref-Fuel to assist it in performing schedule and delay analysis of an initial project delay resulting from the Town of Preston's failure to issue a building permit by the date specified in the service agreement between American Ref-Fuel Company and the Connecticut Resources Recovery Authority.

Hill conducted schedule and delay analyses and assisted Ref-Fuel in preparing its claim for additional compensation due to the permit delay. Hill advised Ref-Fuel on the effect to the schedule of the permit delay, worked with Ref-Fuel and its prime contractors to determine the effects of the delay on each prime contractors schedule, and assisted in the calculation of damages. Hill has also provided construction management advice and recommendations to Ref-Fuel resulting from its scheduling and claims assignment.

Hill, subsequently, was engaged to provide the services of a full time on-site contract/claims administrator to ensure that Ref-Fuel properly researches and documents the building permit process and addresses disputed items in accordance with the terms of the service agreement.

Southeast Connecticut Resource Recovery Facility

The claim between Ref-Fuel and the CRRA is currently in negotiation between the parties. Hill is also assisting Ref-Fuel in the preparation of additional delay claims due to additional regulatory requirements imposed by the Town.

Major Transmission Line Investment Program

Southern California

Client:
Southern California Edison

Service:
Project Controls

Total Project Value:
\$5,400,000

Completion Date:
2009



Southern California Edison Company (SCE) provides power to 430 cities and communities in 50,000 square miles of service area, encompassing 11 counties in central, coastal, and southern California each day. To replace antiquated equipment and add new infrastructure to accommodate growth, SCE has invested more than \$3 billion in its transmission and distribution systems in the last 5 years and expects to invest an additional \$11 billion in electricity infrastructure replacement and improvement over the next 10 years.

SCE's Transmission/Distribution business unit commissioned Hill International to assist Edison in the following areas:

- Development of detailed project master schedule for major capital construction projects
- Monitoring of costs for all the major transmission projects
- Performing project risk analysis on all major projects for major scope, schedule, and cost
- Assisting Edison in claims and risk mitigation
- Assisting in Change and Scope management.

The Hill staff is assisting SCE with the following Engineering/Procurement/Construction (EPC) contracts:

Tehachapi Renewable Transmission Project (TRTP) - SCE is constructing the TRTP to provide the electrical facilities necessary to interconnect new wind turbine based electrical generation in excess of 700 MW and up to approximately 4,500 MW from the Tehachapi Wind Resource Area (TWRA), the richest wind resource in California. The TRTP will consist of a series of new and upgraded high-voltage transmission lines (T/L) and substation facilities to deliver electricity from new wind farms in eastern Kern County, California, to the Los Angeles Basin.

The TRTP consists of eleven segments. Segments 1, 2, and 3 are under construction and expected to be complete by February 2010. Proposed Segments 4, 5, and 10 involve upgrading and expanding SCE's transmission system north of SCE's Vincent Substation in order to integrate TWRA wind generation to SCE's electric system. Proposed Segments 6, 7, 8, and 11 involve upgrading and expanding SCE's transmission system south of SCE's Vincent Substation in order to deliver TWRA wind generation to SCE's load centers in the Los Angeles Basin. Segment 9 involves building a new substation (Whirlwind Substation in Kern County), expanding two existing substations (Antelope and Vincent substations), and upgrading three substations (Gould, Mesa, and Mira Loma substations). The current estimated completion for TRTP 4-11 is December 2013 with a tentative start of construction in October 2009.

Devers-Palo Verde (DPV2) - Modernizing and expanding SCE's wires network is a major part of Edison International's Building the Future strategy. As part of its transmission expansion plan, SCE is seeking authorization to construct the Devers-Palo Verde No. 2 project (DPV2). If approved, DPV2 will provide California electricity customers with greater access to 1,200 MW of cost-effective surplus electricity generated in Arizona. The main purpose of DPV2 is to lower the cost of additional electricity for Californians. Approximately 6,000 MW of state-of-the-art natural gas generation facilities have been constructed near the Palo Verde Nuclear Generating Station in Arizona. Edison's ability to tap into some of that power should help competitively drive down the price of power in California. The largest transmission project SCE has undertaken since the 1980s, DPV2 is estimated at \$680 million. The project scope includes a new 230-mile high-voltage transmission line parallel to the existing Devers-Palo Verde 500kV transmission line. DPV2 connects SCE's existing Devers Substation, near Palm Springs, California, to the Harquahala Switchyard near Phoenix, Arizona. The project also requires upgrades to four of SCE's existing electrical transmission lines west of the Devers substation. The project is currently being reviewed for California Public Utility Commission (CPUC).



Rancho Vista Substation - This is one of SCE's largest projects under construction in 2008, with a budget of \$205 million and targeted operating date of June 2009. The project site is approximately 63 acres and is located southwest of the existing Reliant Etiwanda Generating facility. The substation requires relocation of 66kV sub-transmission lines and protection upgrades at Padua, Mira Loma, and Etiwanda substations. This system includes 245kV and 550kV Gas Insulated Switchgear (GIS), which in comparison with Air Insulated Switchgear (AIS) requires only 25 percent of the site needed for AIS.

Hill international is working with the project management and construction teams providing scheduling and coordination during construction and activation. Field support activities include:

- Development and maintenance of the project master schedule in P5
- Construction meeting schedule development and coordination
- Review of contractor's schedules, including bid schedules, baseline, updates, and other interim schedules
- Weekly progress report for management, including master schedule summary and corporate goals
- Review and coordination of engineering and procurement status
- Identification and tracking of project areas of concern and opportunities.
- Tracking and coordination of construction interfaces and milestones.

Hill developed a one page management project schedule tool with critical path and corporate goals identified and monitored weekly. The team also identified and coordinated some critical path work to be done ahead of schedule resulting in about one month of project time contingency and early completion forecast.

Tyger Construction vs. UNC

Chapel Hill, NC

Client:
Farella, Braun & Martel

Service:
Claims Analysis

Total Project Value:
\$75,000,000

Completion Date:
1994



Tyger Construction Company was given a contract to design and build a replacement boiler and cogeneration facility for the University of North Carolina at Chapel Hill.

Hill was initially retained by Tyger to evaluate the performance of Tyger's design subconsultant in connection with an arbitration concerning cost overruns incurred by the design consultant.

During the course of that investigation, Hill analyzed the overall project engineering and design requirements established by the University's architect/engineer, and identified significant areas where the University had increased the requirements over the base contract specifications and had substantially upgraded the project without granting change orders for the changed work.

Based on Hill's engineering and design analysis and report, Tyger made a claim against the University of North Carolina. As a result of Hill's analysis

Callaway Units 1 and 2

St. Louis, MO



Client:
Union Electric Company

Service:
CPM Scheduling
Project Controls

Total Project Value:
\$2,600,000,000

Completion Date:
1982

Hill was retained by the Union Electric Company of St. Louis, Missouri, prior to the start of construction of the twin-unit 1100-megawatt Callaway nuclear power plants to coordinate the engineering, procurement, construction and startup of this \$2.6 billion project, located in central Missouri. The project team included Union Electric for engineering, procurement and startup; Bechtel for engineering (Power Block) and procurement; Sverdrup and Parcel for site-related engineering; and Daniel International for construction.

A project control procedures manual was written by Hill, melding the owner-architect/engineer-constructor internal procedures with Hill procedures into a unified system to control the schedule, costs, and to produce cash flow forecasts. A construction work order and work sampling system was also developed and included in the procedures manual, followed by training of project staff in the new systems and procedures. The application of these procedures is monitored and periodically audited as to its effectiveness in application. Revisions to the procedures manual are then issued as required.

Hill also assisted the owner in its dealings with the state's Public Utility Commission's management audits of the management procedures involved in the project.

DOE Portsmouth

Portsmouth, OH



Client:
Restoration Services
Incorporated

Service:
Expert Services
Claims Consulting

Completion Date:
Ongoing

Hill will provide subject matter experts including Project Management and Construction Claims Consulting Support to assist RSI with the management of the Decontamination and Decommissioning of the Portsmouth Gaseous Diffusion Plant.

St. Stephen Power Project

St. Stephen, SC

Client:

United States Army
Corps of Engineers

Service:

CPM Scheduling

Completion Date:

1989



Hill was retained by the U.S. Army Corps of Engineers, Savannah District, to prepare a computerized CPM analysis of the construction pre-bid documents. The purpose of the analysis was to determine whether the allowed period of 41 months was adequate to construct the St. Stephen Hydro Power Plant in South Carolina.

A CPM update was also prepared to evaluate the impact that six modifications might have on the construction schedule. To incorporate the installation of turbines and generators provided by others, Hill analyzed the sequence and duration of various construction activities. As a result, changes were made to the schedule.

A detailed schedule analysis was prepared by Hill that resulted in demonstrating how the project could be completed within the allotted time. A computer resource leveling suggested that three Manitowoc No. 4100N cranes should be utilized with only two weeks contingency. A second resource leveling of the concrete batch plant revealed that a plant of about 65 cubic yards per hour was adequate and about 350 men would be required on the concrete. Hill also prepared a weather analysis indicating that four months contingency should be allowed for precipitation. A schedule analysis report was compiled for the Corps of Engineers describing Hill's methodology and conclusions.

Warren County Resource Recovery Facility

Warren County, NJ



Client:
Pepper Hamilton, LLP

Service:
Claims Analysis
Expert Testimony

Total Project Value:
\$40,000,000

Completion Date:
1989

The Warren County Resource Facility consists of two independent, municipal solid waste mass burning plants. Each of the two mass burn plants has a minimum capacity of 180 tons per day each. In addition to handling waste from Warren County's 548,500 residents, the facility also will generate 13 MW of electricity.

Distral Energy entered into a contract with a subcontractor for the erection of the boiler at the facility. Hill International Inc., was later retained by Distral to evaluate 261 extra work claims submitted by the subcontractor.

The subcontractor, in accordance with the terms of the contract, instituted proceeding for arbitration. During the arbitration, for which Hill provided expert witness services, a settlement was negotiated by the parties.

Hill International Inc., was later retained by Distral to evaluate 261 extra work claims submitted by the subcontractor.

Hill's scope of work for Distral Energy also included an evaluation and analysis of a request for an equitable adjustment, resulting from a claimed loss of labor efficiency by the subcontractor.

Hill also provided expert witness services.

Washington Public Power Supply Nuclear Plant

Richland, WA



Client:
Cravath, Swaine & Moore

Service:
Claims Analysis
Expert Testimony
Litigation

Total Project Value:
\$18,000,000,000

Completion Date:
1996

Hill was retained by Cravath, Swaine & Moore who represented Chemical Bank as Trustee for the bondholders of Washington Public Power Supply System Nuclear Power Plant Units 4 and 5 bonds. The Supply system defaulted on the bonds in 1983. Hill provided engineering and technical expertise, cost and damages analysis, and litigation support in connection with a lawsuit over the allocation of costs between Units 4 and 5, and their sister (twin) plants, Units 1 and 3.

The specific tasks performed by Hill in connection with the cost and damages aspects of the matter included:

- Analysis of the allocation and expenditure of more than \$650 million in engineering, construction management and owners costs, and more than \$1.6 billion in construction costs.
- Assessment of the historical rate of engineering and design, construction, licensing and overall project progress for each of the units based on numerous measurement standards including percent complete, engineering and craft man hours, and budgeted and expended costs.
- Analysis of the budgeted and expended costs for engineering, construction and operation of the units, analysis of budget growth

and escalation of operating costs, and assessment of the causes for major schedule delays and the impact of those delays on actual and anticipated costs.

- Developed a series of sophisticated computer damages models for determining damages due to the improper allocation of engineering, construction and owners management and operation costs. The models calculated damages amounts for different scenarios based on an almost unlimited number of variables in methodology and assumptions. Variables included measures of relative engineering and construction progress over different periods of time in the projects' 15 year life, assumptions about the type and proportion of different types of costs to be reallocated, monthly (or other time period) reallocation of each type of cost, and interest, cost of borrowing and rate of return calculations based on several theories of liability and recovery.
- Investigation and analysis of other nuclear power projects with similar cost allocation issues and research of Public Utility Commission and Federal Power Commission rate base and regulatory treatment of cost allocation issues.



Renewable Energy Experience

Renewable energy is the future of energy. Innovation and new technologies are bringing renewable energy projects to the forefront of all global energy initiatives.



Hill International

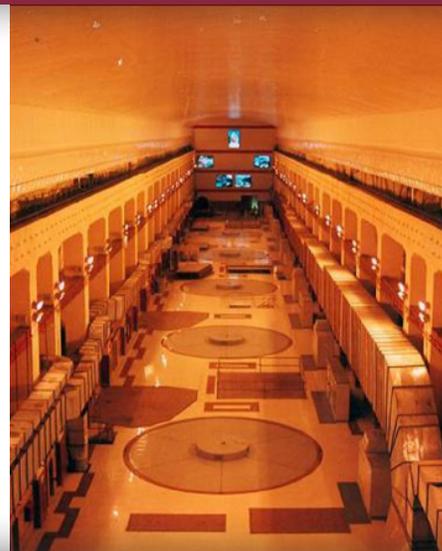
The Global Leader in Managing Construction Risk



Photo: Metro/Luis Inzunza

Los Angeles Department of Water and Power
Solar Panels atop L.A. Metro Building, Los Angeles, CA

www.hillintl.com



Northern India Hydro-Electric Dam
Himachal Pradesh, India



Belwind Wind Farm
Sheringham Shoal, UK

Hill International, Inc. (NYSE: HIL) is a worldwide construction consulting firm providing program and project management, construction management, cost engineering and estimating, quality assurance, inspection, scheduling, claims analysis, and innovative dispute resolution services to clients involved in major construction projects worldwide. Our professionals have extensive experience consulting on and managing the construction of new facilities and infrastructure that will support renewable energy innovation. We have supported the construction efforts of hundreds of energy clients during our 33 year history and are proud to participate in important renewable energy projects that will change the way we power and preserve our planet.

A good example of Hill's involvement with renewable energy projects is our relationship with Los Angeles Department of Water and Power (LADWP). LADWP is the largest municipally-

owned utility in the nation providing water and electricity to more than 3.8 million residents and businesses in a 464 square mile area. LADWP's operations are financed solely by the sale of water and electric services. The Board of Water and Power Commissioners adopted a more aggressive implementation of its Renewable Portfolio Standard (RPS) Program to meet a goal of 20% renewable energy mix by 2010 and a goal of 35% by 2020. To help accomplish these ambitious goals, the LADWP turned to Hill International to assist with contract administration, construction management, project controls, estimating, design reviews, operating procedures, commissioning, and training. "The LADWP renewable energy projects will have a significant impact on the region's infrastructure and power efficiency," said Michael Smith, Hill's Senior Vice President. "We look forward to helping our client manage these important projects," Smith added.



Hill International

Offices Worldwide
800-283-4088
www.hillintl.com

In addition to being a leading project management firm (ranked as the 8th largest in the US by *Engineering News-Record (ENR)* magazine), Hill is also an international leader in construction claims and consulting. Considered to be one of the largest construction claims firms in the world, Hill was founded in 1976 as a multi-disciplined management consulting firm that helps construction participants minimize risks. Hill has developed a reputation for innovative approaches to preventing and resolving construction schedule and cost overruns. We offer public and private clients a full spectrum of construction related services that enable them to complete construction on time and within budget, while minimizing claims and other problems. We have helped our clients resolve over 25,000 claims and disputes valued at more than \$100 billion.



Project Management Services

- Program Management
- Project Management
- Construction Management
- Project Management Oversight
- Troubled Project Turnaround
- Staff Augmentation
- Project Labor Agreements
- Management Consulting
- Commissioning
- Estimating and Cost Management

Renewable Energy Assignments Include

- Chester Waste-to-Energy Plant**, Chester, PA
- H-Power Waste-to-Energy Plant**, Oahu, HI
- Honey Lake Industries**, Susanville, CA
- MERC Waste-to-Energy Plant**, Biddeford, ME
- Southeast Connecticut Waste-to-Energy Plant**, Preston, CT
- Wallingford Resource Recovery Facility**, Wallingford, CT
- Warren County Resource Recovery Facility**, Warren County, NJ
- Wheelabrator Falls Recycling/ Recovery Facility**, Falls Township, PA
- Cathedral Rocks Wind Farm**, Port Lincoln, Australia
- Derrybrien Wind Farm**, County Galway, Ireland
- Dalswinton Wind Farm**, Dalswinton, UK
- Belwind Wind Farm Project**, Sheringham Shoal, UK
- Cornwall Wind Farm**, Cornwall, UK
- Dyffryn Brodyn Wind Farm**, Llanboidy, Wales, UK
- Minsca and Dalswinton Wind Farm**, Lockferie Scotland, UK
- North Hoyle Wind Farm**, Wales, UK
- Robin Rigg Offshore Wind Farms**, Solway Firth, UK
- Scout Moor Wind Farm**, Northwest, UK
- Scroby Sands Offshore Wind Farm**, Norfolk, UK
- Lake Bonney Wind Farm**, Australia
- Volney Ethanol Plant**, Fulton, NY

Construction Claims and Consulting Services

- Claims Consulting
- Litigation Support
- Expert Witness Testimony
- Cost and Damages Assessment
- Delay and Disruption Analysis
- Adjudication
- Lender Advisory
- Risk Management
- Forensic Accounting
- Fraud Investigation
- Project Neutral®

Renewable Energy Clients Include

- ABB Energy Services, Inc.
- Arkansas Power & Light
- Baltimore Gas & Electric
- Bechtel Power Corp.
- Consumer Power
- Cleveland Electric Illuminating Company
- Detroit Water & Sewerage Department
- General Electric Company
- GESCO
- Harlan Electric Company
- Houston Power and Light
- Indiana & Michigan Power
- Jacksonville Electric Authority
- Long Island Lighting
- Louisiana Power & Light Company
- Mississippi Power & Light
- National Dispatch Center of Ukraine
- Nevada Power Company
- Northland Power
- Nova Power Inc.
- PECO
- PSE&G Power LLC
- Public Service Company of New Mexico
- Robbins Electric Company
- Shell Canada Limited
- Southern California Edison
- Texas Utilities
- U.S. Department of Energy



Qualifications Summary

IPV Energy Corporation has come with a resource base that can meet the requirements of any Corporate Renewable Energy Program. Materials, professional services and financing all packaged under the professional oversight of **Hill International**, *“The global leader in managing construction risk”*.

As the saying goes, you are who you associate with and IPV Energy Corporation has selected nothing but the best to be a part of its inner circle. Every participant comes to this presentation with impeccable credentials and a track record of accomplishment second to none.

Hill International has worked on some of the world’s most complex energy projects, sorting out those complexities and bringing about an outcome that is indisputably first class by any definition of the word. Hill has directly managed energy construction and been called upon to review the work of others; Hill knows what needs to be done and this is precisely why IPV Energy has selected Hill International as its preferred provider when it comes to project and construction management.

The independence Hill International brings to the process is important, particularly for large corporations and governmental entities and equally important to the financial backers for such projects. If IPV Energy was not totally confident of the end product it is capable of producing at every level of its supply chain, it would not have selected the best to scrutinize the construction process and oversee quality control all the way back to the factory.

As part of our continuing show of excellence, IPV Energy and Hill International will, as part of their continuing relationship with a client, deliver this Presentation and all subsequent materials via electronic media formats that will facilitate instant global delivery. The process will unfold progressively as our relationship develops.

Phase I

This Statement of Qualifications will deliver via e-mail to primary recipients and simultaneously post to an online site where the presentation will be downloadable by your designated staff.

Phase II

When a formal relationship is entered into between IPV Energy and the client company, the “online site” posting will be upgraded to a special purpose “HTTP” internet site that will be dedicated to that client’s projects. As the data requires updating, it will be updated on the site throughout the life of the business relationship. This is done to keep new members of the client’s organization apprised of not only the original qualifications of IPV and members of its business alliance, but also their ongoing qualifications.

Phase III

The website created will be password protected and critical data stored there will be encrypted to protect the confidentiality, while at the same time keeping the global access for the client, IPV and Hill managers.



Phase IV

In consultation with key management of the client company, IPV and Hill, the website will be developed to reflect several key items:

- Survey and construction schedules for each site proposed
- Contact information for all key personnel associated with the client, IPV, Hill and any contractors and suppliers.
- Relevant financial data associated with the project
- Complete materials lists and relevant performance and certification data
- Internal e-mail, fax and telephone logs as well as photographs taken to document performance and progress
- Permits, licenses, drawings, insurance and bond documents as well as various agreements and amendments to agreements

More sophisticated project management reporting, which is customary in these types of projects, will take place through Hill's Project Management Software and be made available to all appropriately interested parties. This type of reporting may or may not be part of what will be contained within the website, but appropriate disclosure will be made well prior to it becoming an issue.

Unique to the IPV Energy Program is the participation of any number of university researchers and consultants who can bring intelligent dialog to the table and insure that not only present needs are met, but that future needs are addressed here and now, well before the compelling necessity arises for deployment of new technology. This facet of the program comes at no cost to client companies and governmental entities; it is always a part of the overall IPV Energy Program. This is part of IPV's commitment to a better world and it is a resource that is part of every project we undertake.

Transparency, disclosure, dialog, exploration for the best possible solutions and a commitment to the principals of legacy based management© will all insure that goals are met and that the client will be the beneficiary of a renewable energy program that will set forth the industry standard.

IPV Energy Corporation is well qualified to meet the requirements of any size client for developing their renewable energy program and it goes without saying the Hill International's reputation for excellence within the industry will actively insure a positive and beneficial outcome for all concerned.

