

Ian W Vedder **Managing Director**

<i>Education</i>	University of Auckland
<i>Academic Qualifications</i>	Bachelor of Mechanical Engineering (Hons) Post Graduate Diploma in Business Administration
<i>Professional Affiliations</i>	Chartered Professional Engineer (CPEng), IntPE, MIPENZ, Member of Project Management Institute (PMI), PMP Certified.
<i>Areas of Special Expertise</i>	<ul style="list-style-type: none">• Engineering Management• Business Development• Project management - Large multi-discipline projects incorporating civil, structural, mechanical, electrical and control systems including dairy, food and beverage, pharmaceutical, pulp and paper, Water treatment, geothermal development and hydro plant maintenance• Preparation of tenders and proposals• Contract writing and contract negotiation including dispute resolution and settlement negotiations.• General mechanical and process design• Geothermal Steamfield design
<i>Professional Development & Training</i>	
30/9/02 to 4/10/02	Project Management Training for Project Management Professional (PMP) certification covering the 9 Knowledge areas and 5 Project Phases in the PMBOK Project Management Guide (PMI).
7/10/02	Executive Overview for INVEST Programme - company initiative to implement internal process improvement projects.
18/02/03	INVEST Site Co-ordinator training – Workshop on role of Site co-ordinator including methods of running ideas generation workshops for process improvements, project evaluation and selection criteria.
31/03/03 to 2/04/03	Negotiating for Success, Cash Management & Bid Approval Process – Corporate training seminar/workshop on negotiation and cash management skills.
10/06/03 to 11/06/03	INVEST Team leader training – Internal company training course on how to run internal process improvement projects in line with corporate initiatives including ideas generation, project nomination, validation and selection, project management, project execution and tracking.
14/06/03	PMP Examination Preparation course conducted by PMI New Zealand
29/09/03 to 30/09/03	Negotiating Drafting and Managing Commercial Contracts
Trimester 1 , 2004	Post Grad Dip. Bus.Admin – Marketing for Managers
Trimester 2 , 2004	Post Grad Dip. Bus.Admin – Operations Management
Trimester 3 , 2004	Post Grad Dip. Bus.Admin – Business Law
Trimester 1 , 2005	Post Grad Dip. Bus.Admin – Economic
Trimester 3 , 2005	Post Grad Dip. Bus.Admin – Managing People
Quarter 2, 2006	Post Grad Dip. Bus.Admin – Accounting & Finance
Quarter 4. 2006	Post Grad Dip. Bus. Admin – E-Business Strategies
4/12/06 to 5/12/06	IPENZ MIPENZ/CPEng/IntPE Staff Assessor training course

Professional Experience**Apr 2006 – Present** **Project Management Professional Services Ltd, Managing Director**

Development and management of Engineering Consultancy Practice specialising in Project Management Services in the process and utilities industries including

- Power Generation
- Oil & Gas
- Timber, Pulp & Paper
- Dairy
- Food & Beverage
- Industrial Refrigeration
- Process Industries
- Water & Wastewater.

Recruitment of Professional Engineering and Project Management Staff

Preparation of proposals for provision of project management services.

Design Review and preparation of Commissioning Procedures and Commissioning Plan for the Lihir 20MW Geothermal Steamfield Extension Project.

October 2007 SKM UK/ International Power – Due Diligence related to the sale/privatisation of a majority shareholding in the Philippine National Oil Company Energy Development Corporation including investigation and reporting on technical and commercial aspects of the companies operations and condition and viability of Power Generation Assets. The final value of the acquisition of shares was PHP45,000,000,000 (\$NZ1.5 Billion).

Jan 2007 – Present On-shore Project Manager leading a PMP Services Project team for the Construction of a 90MW Geothermal Power Station and Steam Separation Plant at Kawerau NZ. This is the Major component of a \$300 million Geothermal Power Development being undertaken by Mighty River Power. The Power Plant commenced generation in mid July 2008 approx 6 ½ weeks ahead of the contract schedule.

May 2008 – Present On-shore Project Manager leading a PMP Services Project team for the Construction of a 132MW Geothermal Power Station and Steam Separation Plant at Nga Awa Purua NZ. This is the Major component of a \$450 million Geothermal Power Development being undertaken by Mighty River Power. The Power Plant is due for completion in April 2010.

Mar 2005 – Mar 2006**Robt. Stone & Co. Ltd, Business Development/ Improvement Manager**

Responsible for applying professional skills to research and develop business opportunities. Formulate and implement strategies that maximise the securing of fabrication and construction works within the following industries:

- Oil & Gas & Petrochemical
- Pulp & Paper
- Power Generation
- Dairy
- Water & Wastewater
- Process Industries
- Fish & Meat Processing
- Steel Industries
- Mining & Mineral Processing

Duties include:

Research future projects and maintain detailed database of all relevant current information on significant mechanical project work likely to occur in NZ and the Asia Pacific Region in the next 5 years and circulate regular updates of the status of future projects to senior management.

Research future projects, meet the key decision makers and inform them of the interest of the Company in being involved in the projects.

Co-ordinate and submit Registration of Interest and/or Project Prequalification documentation. Documents submitted for the following projects:

- Yaqara Studio City, Fiji
- SWL Tuna Processing Plant Sri Lanka
- Samoa Pacific Patrol Boat Wharf
- Public Works Department, Fiji Suva Sewerage Projects
- LMC Geothermal Power Station 20MW extension, PNG
- Solid Energy Buller 150MW Coal Power Plant
- Goro Nickel Project
- Shell Fiji – 10 years maintenance on tanks
- Whangamarino WTP Upgrade
- Omokoroa Waste Water Scheme
- Public Works Department, Fiji - Navutu Pump Station
- Contact Energy - Geothermal heat plant installation at Kilns at Tenon Sawmill site, Taupo
- Todd Energy Pipeline
- Clutha District Council - Milton WTP Replacement
- LMC Lihir Geothermal Steamfield 20MW Extension, PNG
- Genesis Energy – Awhita Windfarm

Develop relationships with both clients and business partners.

Prepare Tender documentation and review tenders prepared by others. Tenders prepared include:

- Public Works Department, Fiji Waimanu Rising Main (Water Treatment)
- Ongas Wiri LPG Filling and distribution centre
- Huia Village Water Treatment Plant Upgrade Mechanical and Electrical Works
- Proposal for supply of erection labour for Huntly E3P Power Generation project
- Synlait Dairy Factory Boiler Plant
- RNZN Naval Fuel Installation
- Pipe stringing for Pohakura Gas Field Development
- QNI, Queensland Australia, Yabulu Nickel Refinery Expansion – Shop Fabricated Tanks and Structural Steel
- Whangamarino WTP Upgrade
- NZ Steel Supply of Supplementary Mechanical Trades Labour
- PNG Power Round 2 Power Station Rehabilitation, PNG
- LMC Lihir Geothermal Steamfield 20MW Extension, PNG
- Origin, Kupe Gas Plant Mechanical Equipment and Piping Installation, Taranaki
- Origin, Kupe Gas Onshore Pipeline, Taranaki

Business Development including

- Work with senior management team to develop strategies for securing and executing of Project work.
- Develop and continuously improve company marketing materials
- Identify and develop improvements to companies internal systems

Project Management including:

- Huia Village Water Treatment Plant Upgrade Mechanical and Electrical Works – Project Director/ substitute project manager
- Lihir Geothermal Steamfield 20MW Extension, PNG – Technical Director - Conceptual, preliminary process design and mechanical design. Project Management of design process including detailed process design, civil, electrical and automation design. Co-ordination of procurement activities.

Jan 2003 – Mar 2005

APV NZ Limited, Engineering Manager/ Project Management Specialist.

Engineering Manager responsible for Engineering function of business including training and mentoring of all APV New Zealand staff in project/ job management practices including Engineering (Projects), Process Product Sales and Technical Services Departments. Functional management responsibility for Engineering staff including process design, electrical, automation and drafting functions. Tendering for and managing project teams on medium to large projects. Development and implementation of in house quality assurance and management systems.

Continued previous duties as Senior Project Manager plus:

Additional Duties included:

Commercial review and approval of all major contracts/ tenders for business unit including Foxboro Products/ Scada Projects, APV Engineering (Projects), Process Product Sales and Technical Services Departments.

Resolution of long-term contract disputes left unresolved by previous management.

Provision of legal/ contractual advice to management team.

Management of Engineering Staff (5 direct reports) including goal setting, performance reviews, staff discipline and hiring of new staff.

Contract review and preparation of tenders for medium (\$250,000 to \$500,000) and large (\$1M to \$45M) projects in the dairy, food & beverage, refrigeration and pharmaceutical industries including:

- Supply, installation and commissioning of 6 FMG Bulk Butter Packers for Fonterra Te Awamutu and Fonterra Morrinsville sites
- Fonterra Te Awamutu - Supply, installation and commissioning of 4.5 t/h and 9.5t/h skimmed milk powder dryers including dryer building, auxiliary equipment and wet process modifications (\$45M).
- Supply installation and commissioning of Fonterra Te Awamutu Phase 2 Butter Plant upgrade including Butter Maker modification, FMG Bulk Butter Packers, conveying and palletising systems (\$7M)
- Supply installation and commissioning of Fonterra Te Awamutu Phase 1 Butter Plant upgrade including cream silos, manifolds and cream treatment plant (\$8M)
- Supply of \$NZ600,000 of hygienic valves to Tip Top Ice Cream Limited for the 2003 Mix Plant Upgrade.
- Supply, installation and commissioning of \$NZ6.5M Pet food processing line for Iams NZ Limited.
- Fonterra Waitoa NZCP7 Pastueriser Upgrade
- Fonterra Reporoa NZCP7 Pastueriser Upgrade
- Fonterra Kauri Milk Treatment 1 NZCP7 Pastueriser Upgrade Project
- Fonterra Marlborough NZCP7 Compliance Project
- Fonterra Hautapu Starter Pot Upgrade
- Levin Meats Ltd. Beef and Lamb Chiller Refrigeration System Upgrade

Project Management of various medium and large projects in the dairy, food & beverage, pulp & paper, refrigeration and pharmaceutical industries including:

- Project Management of AMF Salt dosing Project at Fonterra Edendale
- Project Management of NZCP7 Cream Pastueriser Upgrade at Tatua Co-operative Dairy Company
- Project Management of NZCP7 AMF Pastueriser Upgrade at Fonterra Te Awamutu
- Project Management of the supply, installation and commissioning of Powder Handling Equipment for a milk treatment and standardization plant, dryer and ribbon blender for the production of infant milk powder for Vinamilk, Vietnam.
- Project Management of NZCP7 Compliance Project at Fonterra Marlborough

Act as regional project management resource for the supply of specialist project management skills to other business units within the Asia Pacific region including:

- Commercial review of contract documentation for APV Thailand for Vinamilk Project in Vietnam
- Audit of Project Management practices at APV Japan including formulation of action plan for improvements to systems and practices

April 2001 – December 2002 APV New Zealand Limited, Project Engineering Team Leader.

Senior Project Manager responsible for training and mentoring of all New Zealand project staff in project management practices, tendering for and managing project teams on medium to large projects and development of in house quality assurance and management systems.

Duties included:

Co-ordination of staff training needs including:

- Facilitating and presenting in house training sessions on advanced applications of Microsoft software (Word, Excel, Project and Power Point) and project management practices.
- Mentoring staff in project management practices and use of software tools.
- Co-ordinating staff attendance at external training courses on technical and project management skills

Development (in co-ordination with various departments), presentation and review of a comprehensive “Engineering Guidelines Manual”. This included procedures on:

- Filing systems (electronic and hardcopy)
- Estimating and tendering
- Project cost tracking systems – setting up cost tracking, tracking contract variations, etc.
- Procurement and stores management
- Project management practices and reporting requirements
- Design – Process Engineering, Refrigeration & Automation QA requirements
- Technical services

This included the streamlining of existing management systems and development of various new systems and tools e.g. new standard cost estimate templates and proposal templates to streamline the estimating and tendering process.

Marketing including the development of market materials (company profile, experience profile, etc), contacting and visiting current and potential customers to present products and services offered by company, development of customer relationships.

Contract review and preparation of tenders for medium (\$250,000 to \$500,000) and large (\$1M to \$15M) projects in the dairy, food & beverage, refrigeration and pharmaceutical industries including:

- Supply, installation and commissioning of a milk treatment and standardization plant for skimmed and whole milk powder at Anchor Products Te Awamutu.
- Supply, installation and commissioning of a milk reception and treatment plant at Westland Co-operative Dairy Company.
- Supply, installation and commissioning of a milk reception and treatment plant at Anchor Products Edendale.
- Supply, installation and commissioning of a 12 tonne/hour Butter plant at Anchor Products Clandeboye including cream treatment and deodorizing, crystallization, butter-making, 25 kg bulk butter packaging and palletizing plant.
- Supply, installation and commissioning of a milk treatment and standardization plant, upgrading of existing cheese making, whey separation and treatment plants at Bega Cheese, Australia.
- Supply, installation and commissioning of a milk treatment and standardization plant, dryer and ribbon blender for the production of infant milk powder for Vinamilk, Vietnam.
- Supply, installation and commissioning of an infant milk powder packaging plant for Vinamilk, Vietnam.

- Supply, installation and commissioning of a variable flow beer flash pasteurizer at Lion Breweries, New Market Auckland.
- Supply and commissioning of a 450 litre glass crystallizer to Kemikara for production of ingredients flavourings.
- Supply of laboratory equipment to Industries Research Ltd.
- Supply and commissioning of a 250 litre glass reactor system for the production of pharmaceuticals to New Zealand Pharmaceuticals Limited.
- Supply, installation and commissioning of a chilled water plant at Westland Co-operative Dairy Company.

Project Management of various medium and large projects in the dairy, food & beverage, pulp & paper, refrigeration and pharmaceutical industries including:

- Development and production of Ice Storm on farm milk cooling system including development of prototype unit, testing and analysis, specification of production units, negotiation of sub supplier and subcontractor contracts for the manufacture of components and management of manufacturing process.
- Contract negotiation and project management of the supply, installation and commissioning of a hybrid ammonia/glycol refrigeration system at Jack Links Snacks beef jerky production plant.
- Completion of contract variation negotiations for the supply installation and commissioning of a 20kg pail anhydrous milk fat (AMF) packaging and palletising plant.
- Project Management of the supply, installation and commissioning of a variable flow beer flash pasteurizer at Lion Breweries, New Market Auckland.
- Completion of contract variation negotiations for the supply installation, automation and commissioning of log soaking plant prior to the debarking process at Nelson Pine Industries.
- Supply and commissioning of a 250 litre glass reactor system for the production of pharmaceuticals at Industrial Research Limited.

Sept. 2000 – December 2000 Signing On Limited, Project Manager

Preparation of tenders for large signage projects including:

- Rebranding of 36 Diagnostic Medlab clinics throughout the greater Auckland area
- Nation-wide rebranding of ON Road Vehicle Inspection Centres
- Tender for the service contract for the supply of signage and graphics to Mobil Oil New Zealand
- Elders Finance Building Signage

Preparation of quotes, specification of materials and project management for various small and medium size signage jobs/projects e.g. Auckland Art Gallery, AAT Kings Bus Graphics, boat signage, fleet vehicle signage, etc

Project Management of large signage projects including:

- Rebranding of 36 Diagnostic Medlab clinics throughout the greater Auckland area
- Providing professional project management services to On Road New Zealand Limited to arrange and co-ordinate activities of installation subcontractors nationwide

Development and implementation of new project management systems e.g. Standard signage installation subcontract agreement, and training/ mentoring of other project managers.

June 2000 – August 2000 **Sinclair Knight Merz Ltd (formerly Kingston Morrison Ltd), Auckland Power Division, Mechanical Engineer.**

Design, review and quality assurance of various mechanical engineering design projects including Pulp & Paper process equipment, sewage treatment plants and geothermal steamfield designs.

Preparation of tender documents and specifications for the supply and installation of a diesel generator and associated equipment at Watercare Services Sewage treatment plant.

August 1997 – June 2000 **Sinclair Knight Merz Ltd (formerly Kingston Morrison Ltd), Philippines, Seconded PGI Advising Production Engineer.**

Seconded by Philippine Geothermal Incorporated (PGI – subsidiary of US based Oil & Gas Company Unocal) to act as an Advising Production Engineer. Provided technical advice to PGI's Engineers and Management on a variety of Geothermal Steamfield and Power Plant related projects at MakBan and Tiwi. Acted as technical adviser and representative of Project Manager for the Overall MakBan Steamfield Upgrade Project.

Duties included:

- Refinement of scope and project economics of MakBan Steamfield Upgrade. The project included the upgrade of six steam separation Satellite Stations, three steam scrubbing Plant Stations and the installation of a new Steamfield Wide Control system. The project had an approximate value of \$US13M and spans five years from preliminary design work in 1998 to the predicted final staged commissioning of the last of the upgraded facilities in 2002.
- Development and management of overall construction program for the MakBan Steamfield Upgrade Project. Co-ordination of work being carried out by several project engineers on different component projects of the Steamfield Upgrade Project. Recommending annual budget requirements for Steamfield Upgrade Project.
- Documentation and presentation of project economics for each component project of the MakBan Steamfield Upgrade Project in order to obtain financial approvals on behalf of the client.
- Presentation of project economics, scope and technical aspects for each component project of the MakBan Steamfield Upgrade Project.
- Conceptual and Preliminary Engineering of MakBan Steamfield Development Strategy Studies, to evaluate options for future development of the Steamfield beyond the Steamfield Upgrade Project. This study encompassed Reservoir Engineering, Steamfield Engineering and Power Plant Engineering.
- Extension of MakBan Steamfield Development Strategy Studies, to evaluate options for additional steam mains and/or new Separation facilities for the future development of the Steamfield beyond the Steamfield Upgrade Project. These were called the Future Strategy studies and involved close co-ordination with the PGI reservoir department and Power Plant Rehabilitation group.
- Wrote procedures and conducted field testing to confirm/update assumptions used in Steamfield Upgrade Project Economics, Steamfield Development Strategies and Future Strategy Studies e.g. vessel efficiency tests, existing vessel pressure drop measurements, Steamfield deliverability characteristics.
- Wrote procedures and conducted combined PGI-NPC field tests to evaluate the feasibility of implementing Turbine Governor Pressure control (i.e. controlling steam supply pressure by automatically adjusting generation load) at the MakBan Geothermal development. Wrote comprehensive report and suggested operational improvements to NPC's operation of the Power Plants.
- Advised NPC on impacts of Power Plant Rehabilitation and optimization on the Steamfield.

- Acted as mentor to all PGI Production engineers on various projects in MakBan and Tiwi.
- Acted as replacement project engineer on various projects during staff absences eg project engineer for Separator Upgrade Project, Wash Water Upgrade Project and BUL-103 Two Phase Pipeline Connection.
- Co-ordinated design work of local and international engineering consultants. Reviewed and approved Engineering designs and reports.

Jan. 1997 – July 1997 **Kingston Morrison Ltd (KML), Philippines, Consulting Site Engineer at PGI Tiwi Geothermal Development**

- Provided technical advice to Client's Engineers and Management on a variety of Geothermal Steamfield and Power Plant related projects.
- *Duties included:*
- Conceptual and preliminary design of various upgrade projects including Power Plant Condensate disposal, Southern Brine Injection Pump Station Relocation and Rehabilitation, MAT Ridge Separator and Brine disposal System Upgrade and Distributed Control system fiber optic cable installation.
- Development, documentation and presentation of project economics for various upgrade project in order to obtain financial approvals on behalf of the client.
- Liaison between KML and PGI (and NPC – PGI's client – on Power Plant related projects).
- Design co-ordination between PGI and KML. Responsible for gathering and providing design-input information to KML on various Tiwi based projects.
- Act as mentor to PGI's junior engineers on various projects.

Nov. 1996 – December 1996 **Kingston Morrison Ltd, Auckland. Senior Mechanical Engineer**

Preparation of piping schedules to be included in contract documents for the construction of Medium Density Fiberboard Plant (MDF3) for Nelson Pine Industries (NPI).

Piping layouts for design of new NPI MDF3 production line.

May 1992 - Oct 1996 **Downer Energy Services (formerly WORKS Geothermal), Mechanical Engineer**

Duties included:

- Project management of G5 and G6 hydro turbine - generator overhaul at the Rangipo Power Station.
- Project management of G4, G3 and G1 hydro turbine - generator overhaul at the Tokaanu Power Station.
- Project management of geothermal well drilling project at Poihipi Road geothermal development, Wairakei.
- Project management of construction projects at Wairakei geothermal field, Ohaaki geothermal field and Kawerau geothermal field.
- Design of Steamfield equipment for Kawerau geothermal field and preliminary design of Mokai geothermal field.
- Preparation of technical specifications for Steamfield valves.
- Preparation of tenders for the design and construction of Mokai geothermal field and Rotokawa geothermal field.
- Preparation of tenders for overhaul of hydro turbines at Piripaua, Tokaanu and Rangipo Power Stations.