



## CURRICULUM VITAE

**NAME:** GEOFFREY PAUL EATON

**QUALIFICATIONS:** B.E. (Mech) 1977, Canterbury University, New Zealand.

**ASSOCIATIONS:** M.I.Mech.Eng., M.NZWEA

**PERSONAL DATA:** DOB: 18th September 1953, married: 3 children, New Zealand citizen.

**COMPETENCIES:**

- Project Manager : Multidiscipline projects for Client or Contractor
- Lead Mechanical Engineer : For consultants and operating companies
- Packaged Plant Engineer : Offshore & onshore facilities, static & rotating equip.
- Piping Engineer : Plant pipe stressing specialist and pipeline design
- Wind Energy : Expertise in wind farm investigations & developments.

### EXPERIENCE:

April 04 – Present

#### **TENERGY NZ LTD—WIND ENERGY DEVELOPMENTS**

- Wind energy promotion throughout NZ. TENERGY has carried out the largest wind energy resource survey of New Zealand using the mesoscale / microscale modeling technique. The survey covers 19000sqkm. .
- Wind farm site investigations carried out for various companies, NZ and overseas.
- Development of a re-deployable, climbable and cost effective wind monitoring mast.

Dec 09 – Jun 10

#### **AWE (Australian Worldwide Exploration) Ltd, Australia**

##### **Project Company Rep: Yolla A Platform-Bass Strait : Mid Life Enhancement**

Liaison with Origin Energy (Aus) the field Operator and manager of the MLE project. Duties also involved working with AWE engineers from Alpha Petroleum Services, Houston, on a due diligence review of the construction strategy and compressor configuration to be used for the MLE project.

Mar 08 – Feb 09

#### **TODD ENERGY LTD, NEW PLYMOUTH, NZ**

##### **Project Manager: Mangahewa Generation Station – 9MW**

Three 3MW GE Jenbacher high efficiency gas engines generate electricity at 11KV which is exported onto the local distribution grid at 33KV. The station was installed in a brown field area in McKee Production Station. The plant is managed by Todd subsidiary BOPE, who also oversaw the commissioning and livening of the plant.

Jan 07 – Aug 07

#### **AML CONSULTANTS, MELBOURNE AUS**

##### **Lead Mechanical Engineer- Montara FPSO Project, Client: TPOT Singapore.**

Project was tanker conversion to FPSO for Montara field operated by Coogee Resources. Responsible for bid preparation for mechanical works and managed detailed design works until PID AFD status. Assisted with detail mechanical design until AFC stage.

Oct 05 – Aug 07

#### **PROCESS GROUP LTD, MELBOURNE, AUS**

##### **Project Manager for Zamzama Gas Field - Amine Plant ( Client : BHP Pakistan )**

The US\$11M Amine Plant using BASF process design is designed to remove 3% CO2 from a 154MMscfd gas stream. Responsibilities included managing a design group in Melb, liaising with BHP Billiton and their engineering contractor Aker Kvaerner and placing and co-ordinating a fabrication contract with DESCON Engineering, Pakistan, for the fabrication and erection of the plant at the Zamzama Gas Field.

Geoff Eaton

**Project Manager / Project Engineer / Mechanical Engineer**

- Nov 04 – June 05      TRANSFIELDWORLEY NZ LTD, NEW PLYMOUTH NZ**
- Mechanical Plant Engineer- Pohokura Gas Plant Project, 200 MMSCFD**  
Responsible for Glycol Regeneration Plant, IP Booster Gas Compressor, API 650 Tanks, Flare Package and Foam Package., and miscellaneous mechanical items.
- Sept 02 – Aug 04      NGC HOLDINGS, KAPUNI GAS TREATMENT PLANT, NEW ZEALAND**
- Project Manager**
- Recommissioning of Gas Train No. 1, which had been decommissioned approx 20 years earlier. Revamp included complete audit of all piping and recertification of all vessels, including new absorber column, imported from Australia and completed with body weld insitu. ( Total Budget NZ \$ 14M)
  - Installation of 100 Tonne LPG Storage bullet and Demin Water Plant Replacement .
  - Feasibility Study for Capacity Expansion of Kapuni Gas Treatment Plant.
  - Mechanical audit report of Kapuni Gas Treatment Plant.
  - Study of flare disenainment drum suitability for EDP system.
- May 02 – Sept 02      PREMIER OIL NATUNA SEA LTD (Jakarta, Indonesia)**
- Lead Mechanical Engineer - Gajah Baru Platform and AGX Mods.**  
Technical bid evaluation for selection of EPIC contractor for 110MMSCFD gas platform to be installed in Natuna Sea. Specification of GT driven centrifugal compressor for AGX.
- Oct 00 – Apr 02      PLANT & PLATFORM CONSULTING ENGINEERS, NEW PLYMOUTH, NZ.**
- Lead Mech./Commissioning Eng. - Rimu Production Station (Swift Energy NZ LTD)**  
Green field oil & gas production station sized at 20MMSCFD and 7500 BOPD. Facilities included; wellhead manifolds and heaters, stabilization plant, LPG train, oil & LPG storage and load-out facilities. Services included: glycol, refrigeration, 10MW hot oil package, inert gas generation, firewater pumps, tulip style gas flare and oil free instrument air.
- Aug 00 – Oct 00      NGC HOLDINGS, KAPUNI GAS TREATMENT PLANT, NEW ZEALAND**
- Senior Mechanical Engineer / Project Engineer**  
Preparation of Plant Change procedures, and Project Execution procedures. Assisting with closeout of existing projects and general mechanical engineering issues.
- Mar 00 – Jun 00      PREMIER OIL NATUNA SEA LTD (Jakarta, Indonesia)**
- Senior Mechanical Engineer - AGX Offshore Platform**  
Client rep for DEG Package, RO plant, Flare System & various utility equipment for AGX gas platform. Mech. engineer for Early Gas skid, and modifications to Anoa gas platform.
- Apr 98 – Feb 00      EATON CONSULTANTS AND SERVICES (New Plymouth, New Zealand)**
- Project Engineer / Lead Mechanical Engineer**  
Natural Gas Corporation, Kapuni Gas Treatment Plant -- New Zealand  
Upgrades of Gas Train 3 Capacity , water plant & CO2 Loadout arm, LTS Gas Train O/head Gas Recovery, non-recurring maintenance contracts, Fin-fan refurbishments.
- Kiwi Dairies, Hawera, NZ: Study of cooling water system to improve capacity.
- Cakerawala Gas Field Development - Ranhill Worley / CTOC, KL, Malaysia  
Preparation of specifications for: pumps, vessels, compressors, HVAC / Chilled water systems, safety equipment and miscellaneous utility equipment. Input into BOD.
- Produced Water System Modifications Shell Todd, Kapuni ,New Zealand--( BECA)  
Tank T604 conversion to dual use, condensate & produced water. Piping modifications for conversion and tank modifications to allow installation of radar level instruments.
- Oct 97 – Mar 98      BECA CARTER HOLLINGS and FERNER (New Plymouth, New Zealand)**  
**Geoff Eaton                      Project Manager / Project Engineer / Mechanical Engineer**

**Lead Mechanical Engineer / Project Engineer**

Asgard B. Glycol Purification Module – Kvaerner Process Systems, Oslo, Norway

Specification, bid evaluation and vendor data review of process pumps, vessels and piping specialties. Pipe stressing of process (duplex SS) and hot oil piping.

Increased Flow Study for Lyttelton to Woolston Pipeline – Mobil Oil NZ Ltd., Christchurch

Review of mid 1950's petroleum pipeline. Thick wall pipeline has potential for increased MAWP. Study outlined pumping options for increased flow & integrity survey strategy.

Jan 95 – Oct 97

**NEW ZEALAND WORLEY LTD (New Plymouth, New Zealand)****Lead Mechanical Engineer / Project Engineer**

RESAK Gas Platform - Petronas Carigali, Kuala Lumpur, Malaysia

Preparation of equipment specifications, including; Glycol Contactor & Regeneration Skid, Turbine Generators (3.5MW), Production Coolers (9MW fin fan units), separators / vessels, FW pumps, caisson pumps, centrifugal and PD condensate pumps.

NGC Transmission - Field Operations Team Leader (secondment)

Co-ordination of Mechanical Field Technicians responsible for maintenance of NGC's gas transmission facilities. Managed survey and efficiency estimation of all Water Bath Line Heaters installed on NGC network and Critical Valve Survey.

NGC Kapuni Co-generation Plant - Senior Engineering, Sydney Australia

Pipe stressing for 20MW (2 x 10MW) Co-generation plant installed in existing gas processing plant.

Kapuni Gas Treatment Plant Refurbishment - Natural Gas Corporation, NZ

Instrumentation upgrade for DCS & ESD systems and throughput increase with new gas separator and LPG reflux pumps. New 316L cold flare header & flare upgrade. New Propane Refrigeration system (screw compressors) and methanol dehydration system. Drainage & effluent treatment upgrade. New HVAC systems in hazardous areas.

Tank Conversion / Pipeline Pumping Stations - Methanex (NZ) Ltd.

Project Management of EPC packages for two Methanol pipeline pump stations. Conversion of storage tank and inlet/outlet facilities for dual service, (Methanol & Gasoline) at Omata 2 Tank Farm.

Kiwi Dairy Pipeline / Gas Treatment Facilities - Shell Todd Oil Services

Mechanical design of wet gas pipeline facilities, including launcher & receiver, KO drum, S&T gas heater, meter runs, corrosion inhibitor and methanol injection skids.

TAWN Project (oil gathering network) – Petrocorp, NZ

EPC bid preparation for gas & oil gathering lines and LPG production facilities. Included mechanical equipment specifications, bid evaluation and documentation preparation.

Jan 94 - Jan 95

**KUWAIT OIL COMPANY (KOC, Kuwait)****Project Engineer / Lead Mechanical - Central Seawater Injection Facilities**

Project was a 1,000,000 BWPD seawater treatment plant, 47km of 900NB CS transfer pipeline, HP injection plant and pipeline/flowline system to service Raudhatain and Sabriyah oilfields, North Kuwait.

Responsibilities included; managing design consultant & internal depts. on mechanical and piping issues, obtaining ROW approval with municipality for pipelines and treatment plant, & preparation of BOD and bid documentation for selecting LSTK contractor.

Oct 91 - Nov 93

**BRUNEI SHELL PETROLEUM SDN BHD (Seria, Brunei)****Project Engineer - Rasau Field Upgrade**

Major upgrade of a 25,000 BPD onshore oil field. comprising: 13 new wellhead facilities with manifolds and bulk flowlines, a high capacity separation train, HP and LP separators, Conversion to electronic instrumentation, DCS and telemetry to a central control room, electrical switchgear room & redesigned control room with radio tower, 2 x 190Kw oil transfer pumps, smokeless ground flare, 2x 17km long pipelines, 400NB (gas) & 200NB

(oil), along a swampy jungle route, with one major river crossing (bottom tow) and three major thrust bored road crossings  
Responsibilities included;- Budget control (B\$32M / US\$20M), co-ord of design, procurement, construction and commissioning.

**Sept 87 - Oct 91 DAVY McKEE PACIFIC PTY.LTD. ( Melbourne, Australia )**

**Piping / Mechanical Engineer**

SHELL'S RCCU Plant, Geelong, AUS (Piping Engineer)

Piping Engineer, preparation of bulk piping and S.P. item requisitions and member of pipe stressing team. Stress analysis for high temperature steam, catalyst and oil lines.

Electrolytic Zinc's, Zinc Purification Plant, Risdon, Tasmania (Lead Piping Engineer)

Design of entire Zinc Purification Plant using mainly GRP pipe (approx. 7km), size range 50NB to 500NB. Site supervision of material issue and pipe installation.

AMPOL EX's JUHA gas field development—Study, (Mechanical Engineer)

Selection of gas reinjection compressors & transfer line study for CO<sub>2</sub> & H<sub>2</sub>S.

**Mar 85 - Aug 87**

Lived and worked in Japan and Asia:

Proofreading technical manuscripts for publishing in Western Journals.

**Jan 82 - Feb 85**

**P.L.E. PACIFIC LTD. (Sale, Victoria, Australia)**

**Piping / Mech. Engineer - ESSO's Offshore and Onshore Facilities – Bass Strait**

Mechanical Engineer responsible for preparing work packs for the following projects;

Water Handling Facilities- Installation of Vortoil and corrugated plate types

Skimmer Pile Installations- Detailed design, including equipment selection

Turbine Meter Installations- Equipment selection and piping design, various platforms.

Reverse Osmosis Water Makers- Equipment specification and installation on platforms.

Pipeline Linalog Study- Survey, followed by rectification of piping for intelligent pigging.

Miscellaneous Projects- Halon systems, booster pumps, FRP vent stack, Hot taps etc

**Jan 81 - Dec 81**

Various short term contracts in Melbourne, Australia as follows:

Minenco - Bougainville Copper Plant- Plant layout for extension of concentrator.

Tieman Industries - Road Tanker: To AS1210 & AS2016 of 4 compartment double conical chemical tanker with ripple plate heaters.

Kato Industries-Refinery piping design and flange design to AS1210.

**Apr 80 - Sept 80**

**WALTER KIDDE CO. LTD. (London, UK)**

**Piping Designer**

Specification / design of "Halon" fire protection systems for off & onshore installations.

**Oct 79 - Mar 80**

**ATOMIC POWER CONSTRUCTION LTD. (London, UK)**

**Piping Designer - Dungeness "B" Nuclear Power Station, Kent, UK**

Conventional plant installation in reactor building. As building of piping & pipe routing for additional safety systems.

**Sept 78 - Sept 79**

**HARRIS & PARTNERS CONSULTING ENGINEERS (London, UK)**

**Mechanical Engineer**

Upper Zakum Wellhead Platforms, UAE

2-phase flow pressure drop calculations. Specification of platform equipment.

Abu Dhabi Gas Project, UAE

FEA of liquefied butane and propane load out lines, using Sesam-69 programme.

Saudi Arabian Royal Commission, Saudia Arabia

Cost models for pumping stations, gas compression stations and transmission lines.

**Nov 77 - Apr 78**

**WOOL RESEARCH ORGANISATION (Christchurch, New Zealand )**

**Mechanical Engineer**

Design of rotating textile machinery, transducers and gearboxes for "random pattern" yarn snubbing machines. Extensive drafting of machinery for patent applications.

**Geoff Eaton**

**Project Manager / Project Engineer / Mechanical Engineer**