Dear Members,

I would like to thank our members for electing me to the position of President at the 92nd IGE AGM which was held at the BANKSTOWN SPORTS CLUB, 8 Greenfield Parade, BANKSTOWN NSW on Wednesday 2nd May 2012.

I also would like to welcome both our long serving and new directors to the Board and thank Ray North for his guidance and leadership over the last two years as president.

The AGM went very smoothly and followed a very enjoyable breakfast Seminar which provided welcome information on National Gas Qualifications, by Norm Cahill NSWUEITAB CEO and Gas Passport and Licencing by David Hughes National Training Manager Gas and Electricity Jemena.

The IGE had many successes over the last 12 months, the IGE successfully sourced funding for 45 Certificate III and IV Gas Industry operations training position with a potential saving of over $300,000 dollars for much needed training. The IGE Represented the industries requirements in both a proposed Gas Fitting apprenticeship and commented on the proposed Gas Supply (Consumer Safety) Regulation 2012 with Several members contributed their experience to preparing.

The IGE has arranged two functions for the remainder of the year, a Members informal gathering at The Bowlers club, Level 2, 99 York Street Sydney, Thursday 27th September at 5:30pm, nibbles and first drinks provided. Also, Christmas Dinner at The Bowlers Club, China Drum Restaurant, 99 York Street Sydney at 6:30 pm on the 30th November 2012. You will receive invitations for both functions via e-mail and information on future functions will be ‘posted’ on the IGE WEB site.

Martin deBoer
40kVA Kohler Residential Dual-Gas Generator

If your family residence boast 8 bedrooms or more plus basement car accommodation for 6 - 8 vehicles plus an internal electric lift so you don't have to walk down the four levels from the top bedrooms to the basement car park and the all-weather climate-controlled indoor-pool, then the “Kohler 40ERES 40kVA Residential Dual-Gas Generator” will be just fine to ensure that ‘never-ending’ electricity supply is always at hand (more humble home owners may opt for one of the smaller 8.5kVA and upwards backup residential gas generators).

Now some details how the ‘never-ending’ electricity supply is always at hand…

If there is a power failure in the regular electricity grid supply, the ATS (Automatic Transfer Switch) of the gas generator will automatically attempt to start the General Motors 4.3 Ltr V6 engine of the generator on primary fuel (Natural Gas). If the NG supply is also down, or when the primary fuel (NG) pressure drops below 0.6kPa, a gas pressure switch (visible in the right hand corner of the lower gas gallery) activates a relay which then opens the backup (LPG) fuel solenoid valves (upper fuel gallery) and closes the primary (NG) fuel solenoid valves. When the primary (NG) fuel pressure rises above 0.6 kPa, the generator set automatically changes back to the primary (NG) fuel.

The emissions certified models use a single electronic controlled pressure regulator (EPR) for both fuels. A tee fitting connects both fuels together. During operation when using the secondary fuel, it is normal for a small amount of secondary fuel (LPG) to seep back through the primary fuel solenoid valves. To counter this situation, a third solenoid valve (not identical to the primary fuel solenoid valves) is installed in a reverse configuration on the primary fuel side (the smaller fuel solenoid with the red top).

If neither NG nor LPG is available at normal operating pressure, then the “Low Gas Pressure Switch” (“Dungs Switch NB 50 A4 with manual reset” as seen atop the brass T-piece) will shut off all gas valves to avoid hazard for the engine [as per AS3814-2009 (Industrial and commercial gas-fired appliances), 5.8.2.4 (c)].

Because the “Kohler 40ERES 40kVA Residential Dual-Gas Generator” has a max gas consumption of 502MJ/h, two “Class 1” fuel gas solenoids in-line have to be fitted [as per AS3814-2009, 5.8.2.1 (b), and 2.14.3.1 (a) and (b), for gas engines and turbines exceeding 500MJ/h]. Four (4) “Dungs MVD207/5” gas solenoids (as visible in the photo) have been used to comply with Australian Standards.

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Operational services supplier selected for Victorian distribution network

Multinet Gas has selected Comdain Infrastructure as the preferred operational services supplier for its gas distribution network.

Comdain was selected as preferred service provider after a comprehensive, competitive market tender process and brings with it extensive knowledge and experience delivering capital and maintenance programs on the Australian gas network.

Comdain Managing Director Tom Coen said “Working with Multinet through the evaluation and selection process gives me great confidence that our similar collaborative philosophical approaches will ensure this contract will deliver beyond expectations.”

Comdain said that it is committed to partnering with Multinet to deliver innovation and improvements to the ongoing operations and maintenance in the delivery of natural gas to customers in its network distribution area. Comdain and Multinet will work together to ensure a smooth transition of the appropriate services to all stakeholders.

The commercial framework adopted provides a collaborative working relationship as it aligns the risks of the parties and supports cost transparency for Multinet whilst delivering quality construction and maintenance of Multinet’s assets. A key performance indicator structure has been designed to incentivise Comdain’s continuous improvement philosophy.

Multinet distributes approximately one third of Victoria’s annual gas load to more than 660,000 customers across Melbourne’s inner and outer east, the Yarra Ranges and South Gippsland. Its distribution network includes 232 km of transmission pressure pipelines, with 9,728 km of distribution mains.

Comdain will service Multinet’s distribution network for an initial five-year period commencing 1 July 2013.
Continued from page 2

Finally, in order to comply with AGA AS 4631-2005 specifications, a 1” SS316 Convoluted Standard Flex Hose Assembly with Carbon Steel 1” NPT male hex nipples connects the gas gallery to the gas regulator atop the V6 engine.

The photos **003 & 006** show the **gas setup**, details: the top gallery (LPG) has 2 shutoff solenoids plus a low-gas-pressure-shutoff-switch. The bottom gallery (NG) has 2 shutoff solenoids plus 1 reverse-mounted shutoff solenoid to prevent LPG seeping back into the NG line.

The fuel system automatic changeover from Natural Gas to LPG vapor. The primary fuel is Natural Gas; the backup fuel is LPG vapor. Before starting, all fuel solenoid valves are closed. When the generator set starts, the primary fuel solenoid valves open. The primary fuel line has a pressure switch in series with a relay connected to the start/run circuit. If the primary (NG) fuel pressure drops below 0.6kPa, the secondary (LPG) fuel supply will automatically take over.

The **photo 4842** shows the **dual-gas regulator** atop the GM 4.3 Ltr V6 engine.

The **40ERES data sheet** shows all main technical info. (copy available by request)

The **Dungs Gas Solenoid** brochure list all the gas solenoid specifications. Class A / Class 1 gas shutoff solenoids have to be fitted for AS3814 .8.2 and 2.1.4.3.1(b) compliance for Australia. (copy available by request)

The **Dungs Low Pressure Switch** brochure explains the low-gas-pressure switch as required by AS3814-2009 5.8.2.4(c) (copy available by request)

A **Pre-Delivery Certificate** is a own in-house EPG Engines certificate that gets issued with each Kohler Gas Generator upon in-house pre-delivery. (copy available by request)

**About EPG Engines:**

EPG Engines are the Australian Distributor for industrial Kohler Petrol Engines, industrial Kohler Diesel Engines, and residential/commercial Kohler Gas Generators. The national head office is in Sydney (Seven Hills). For more info visit [www.epgengines.com.au](http://www.epgengines.com.au)
About Karl Bunzel:
Karl Bunzel is the National Technical Support Manager for EPG Engines and employed with the company since 1980. Karl Bunzel (MIAME) is a qualified Motor Mechanic, LPG Mechanic, and an accredited Gas Appliance Worker (ACT Gas Safety Act 2000). He can be best be contacted by email at EPG Engines: kbunzel@epg.com.au
Make way for Zinfra: an infrastructure service company with a difference

Zinfra Group launches and separates from asset owner Jemena, ensuring it will turn heads in the gas transmission, distribution and network industries.

Zinfra Group was established from the separation of Australian energy infrastructure company Jemena, into a separate assets business and services business. The services business began trading as Zinfra Group on 1 April 2012, and was launched at the FutureGAS Conference and Exhibition where the company was an industry award sponsor. Both Jemena and Zinfra Group are wholly owned by Singapore Power.

Zinfra will provide engineering, construction and maintenance services to the utility infrastructure sectors across Australia. Zinfra Group will progressively operate three brands according to the markets in which they operate. Zinfra will deliver services in the general contracting market, ZNX in the integrated network services market and the well-respected CLM brand will be retained in our NSW and Victorian water and civil markets.

Zinfra Group has a number of key points of difference that set the company apart from its competitors.

According to Mr Beach, Zinfra Group has an intimate understanding of the gas, electricity and water industry, strong engineering and project management capabilities, and a productive workforce that sets the company apart from other service providers.

Our utility heritage, couple with our competitive business approach, allows us to better understand and respond to our clients’ needs – it’s a genuine point of difference” says Mr Beach. Zinfra Group also has a wealth of engineering expertise and experience that underpins the extended and specialised service offering.

“This unique capability is deployed through a combination of skilled engineering personnel embedded within our maintenance and construction delivery teams, through to the professional engineering and design services provided by our business-wide Major Projects and Engineering Solutions Group.

“This in-house engineering capability assists us to drive comprehensive maintenance and capital works programs and drive innovation and service delivery optimisation to lower cost and add value for our clients,” says Mr Beach.

Despite the obvious advantages of separating the Jemena business into a separate assets and services business, creating a whole new brand for any organisation is a bold and challenging business venture.

Continued next page
Establishing Zinfra Group as a stand-alone business that is competitive and client focused requires significant changes in policies, systems, processes, business capabilities and our overall mindset to be reflective of a competitive services business.

“Employee engagement in establishing the separate business remains important to its success and to date we have had great feedback on our new brand and vision.”

To meet the challenges ahead Mr Beach has surrounded himself with a strong and passionate leadership team with a wide range of skills in asset, operations and infrastructure development and management including maintenance, design and engineering, construction and commercial and business leadership.

“Our leadership team has a shared belief in a set of values and principles that govern the way we do business and we work together as a team, trusting and supporting each other with a combined focus on success,” says Mr Beach.

Zinfra Group has set challenging but achievable goals for the first year of their operations.

“We believe there are significant opportunities for our offering in the market place arising from existing electricity, gas and water asset owners. Equally there are also new opportunities in adjacent markets such as mining, rail, telecommunications and renewable energy projects. We are well placed to capitalise on these opportunities in both the traditional and the emerging markets.

“I believe one of the significant challenges the utility services industry faces in the near future is a shortage of skilled labour”, says Mr Beach.

A key initiative of the Zinfra Group is to achieve accreditation as a Registered Training Organisation creating less reliance on external training providers who are struggling to meet industry needs.

“This initiative will provide an effective training governance framework and assist to build a development and continuous improvement culture within the company.”

“It’s a great time to work in this industry and a significant opportunity to develop a truly challenging and rewarding career in the utility and infrastructure industries exists. Critical infrastructure continues to be a high priority for governments and private sector asset owners.

“Ageing assets and asset expansion is driving high volume capital works programs and we are competing directly with the booming resources sector for key talent. Our breadth of operations across Australia coupled with our depth of capability provides tremendous career development opportunities.”

Editorial courtesy of Gas Today  www.gastoday.com.au
25th World Gas Conference
4th-8th June 2012 Kuala Lumpur, Malaysia

EE-Oz Training Standards Annual Conference 2012
29th-31st October 2012 Alice Springs Convention Centre, NT

NSW Utilities & Electrotechnology ITAB
6th & 7th August 2012 Peppers Anchorage, Port Stephens NSW

APIA Convention 2012
13th-16th October 2012 — Brisbane Convention and Exhibition Centre

Just a thought
How can someone draw a blank?
Why do you call them “Apartments” when they are all stuck together?
Why is there an expiration date on sour cream?
If someone with multiple personalities threatens to kill himself, is it considered a hostage situation?

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Knowledge in the industry through experience and people