

THE NEW ZEALAND INSTITUTION OF GAS ENGINEERS (INC)

NZIGE News

December 2006

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December 2000

Newsletter to Members

December 2006

Welcome to the last edition of the NZIGE News for 2006. On behalf of the Council I would like wish you and your families a Merry Christmas and a safe and enjoyable New Year.

Feature articles...

- 2006 Spring Technical Seminar
- GTI Recent Technical Achievements
- Gas 101
- Christmas Lights Safety Tips
- The UK Gas Crisis 2005 2007

2006 Technical seminar



The 2006 Spring Technical Seminar and 82nd AGM were held in Auckland on the 18th and 19th October 2006. "Gas – The Burning Issues" was the title of this year's seminar.

The topical presentations over the day and a half highlighted some of issues the gas industry is facing. Such as getting gas to market, the coregulation environment, emergency management, emergence of renewable energy, investment, training and competency.

Every aspect of life creates issues. I trust that delegates attending the seminar not only expanded their knowledge of the current issues within the gas industry. But I also hope that it encourages them to tackle all issues head on and thereby provide innovative solutions to overcome them.

The council would like to acknowledge the time and effort that the presenters put into delivering quality topical presentations. Thanks to:

John Barrell Mark Dunphy Rodney Deppe Ian Wilson Andrew McLeod Stephen Parker Tony Hammond Guenter Wabnitz Steve Featherston Liz MacPherson Phil Caffyn Mike Killick Dan Hynson Steve Hodgens Ian Chapman

Pipeline & Metering Consult Greymouth Petroleum Todd Energy GIC Vector GANZ GANZ Maunsell IGEM President MoED Utility Consultants OpEx Powerco DigSafe Powerco

The council would also like to knowledge the following companies for supporting this year's seminar:

- Ampy Email Metering
- Lordco CWG (NZ) Ltd
- Custom Controls Ltd
- Vapourgas Equipment Ltd
- Central Utility Supply Ltd

2007 Technical seminar

The confirmed dates for 2007 Spring Technical Seminar are:

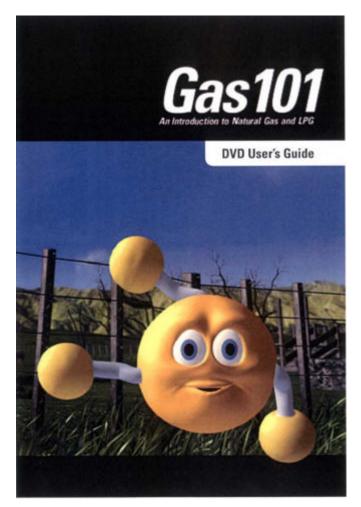
Golf Tourn. - Sunday 30 September 2007 Seminar Day 1 - Monday 1 October 2007 Seminar Day 2 - Tuesday 2 October 2007

IPENZ e.nz magazine

This magazine is available to NZIGE members for \$40 + GST including postage.

There are 6 issues of magazine sold on calendar year basis.

To subscribe please visit www.e.nz-magazine.co.nz/main.htm



Gas 101 an introductory learning DVD detailing the gas industry from extraction to home was launched in Wellington on 30 November 2006. It was commissioned by the gas industry as an educational and promotional tool highlighting every aspect of gas and the industry.

The DVD uses innovative 3D training technology to show in-depth representation of plant and equipment technical construction and functionality. It clearly illustrates time based cause and effect including predictive analysis so that viewers can see and understand clearly every aspect of gas.

Health and safety messages are an intrinsic part of the learning covered by the DVD making it an ideal training medium on gas for associated gas personnel such as police, fire, occupational health, civil defence, ambulance and other healthcare staff.

A Users Guide has been developed to be used in conjunction with DVD to make this an interactive teaching and learning experience in a group or solo situation.

To obtain a copy of the DVD and user guide please contact Diane Davidson on 04 492 9220 or email <u>diane@ganz.org.nz</u>

GTI Announces Recent Technical Achievements

11/16/06 Des Plaines, IL

Gas Technology Institute (GTI) announced today that through the third guarter of 2006, 14 new patents were issued to GTI and 17 patent applications were filed. In addition, 15 invention disclosures have been submitted to GTI by inventors, which marks the start of the process for obtaining a patent. Thirty-four GTI applications are currently pending with the U.S. Patent Office. Included in the count of issued patents are two on inventions made by GTI employees for Operations Technology Development, NFP (OTD), an Illinois not-forprofit company that facilitates voluntarily funded, collaborative research on issues relating to gas operations and infrastructure. GTI is a leader in introducing new energy technologies to the marketplace. Since 1941, research activities of GTI staff have resulted in more than 1,000 patents, and nearly 500 products incorporating GTI-developed technology have been introduced. These innovations contribute to a secure, abundant, and affordable energy future, and encompass all aspects of the natural gas industry. The most recently issued patents include:

Distribution and Pipeline Technology

- <u>U.S. Patent 6,994,819 B2–Method to</u> Locally Reround Plastic Pipe (pdf 385 KB)
- <u>U.S. Patent 7,021,868–Lightweight</u> <u>Shoring System for Accommodating Crossing</u> <u>Utilities</u> (pdf 629 KB)*
- <u>U.S. Patent 7,109,716 B2–Soil and Time</u> <u>Modeling for Improved Electromagnetic</u> <u>Locators for Underground Utilities</u> (pdf 317 KB)*
- <u>U.S. Patent 7,021,868–Lightweight</u> <u>Shoring System for Accommodating Crossing</u> <u>Utilities</u> (pdf 629 KB)
- <u>U.S. Patent 7,109,716 B2–Soil and Time</u> <u>Modeling for Improved Electromagnetic</u> <u>Locators for Underground Utilities</u> (pdf 317 KB)
- <u>U.S. Patent 7,034,768 B2–Antenna</u> <u>System</u> (*pdf 563 KB*)
- <u>U.S. Patent 7,013,991 B2–Obstacle</u> <u>Detection System for Underground Operations</u> (pdf 1.31 MB)

*OTD Patent. For more information, contact pr@otd-co.org

Exploration & Production

• U.S. Patent 6,985,815 B2–Instantaneous Spectral Analysis (pdf 1.73 MB)

Energy Utilization

- <u>U.S. Patent 7,066,396 B2–Method and</u> <u>Apparatus for Enhanced Heat Recovery from</u> <u>Steam Generators and Water Heaters</u> (pdf 793 *KB*)
- <u>U.S. Patent 7,077,644–Advanced</u> <u>Commercial Range Burner</u> (pdf 431 KB)

Hydrogen Energy Systems

- <u>U.S. Patent 7,008,711 B2–Thermally</u> Integrated Fuel Cell Power System (pdf 732 KB)
- <u>U.S. Patent 7,037,414 B2–</u>
 <u>Photoelectrolysis of Water Using Proton</u>
 <u>Exchange Membranes</u> (pdf 506 KB)

• <u>U.S. Patent 7,059,364 B2–Control</u> <u>Method for High-Pressure Hydrogen Vehicle</u> <u>Fueling Station Dispensers</u> (pdf 788 KB)

Misc.

- <u>U.S. Patent 7,083,956 B2–Method for</u> <u>Hydrogen Production from Organic Wastes</u> <u>Using a Two-Phase Bioreactor System</u> (pdf 508 KB)
- <u>U.S. Patent 7,087,434 B2–Automatic</u> <u>Portable Formaldehyde Analyzer</u> (pdf 353 KB)
- <u>U.S. Patent 7,108,455–Carbureted</u> <u>Bioventing for Enhanced Control of In-Situ</u> <u>Bioremediation</u> (pdf 456 KB)

A comprehensive listing of all GTI's patents available for commercialization can be found on the GTI website under <u>Commercial</u> <u>Opportunities</u>.

GTI is the leading research, development and training organization serving the natural gas industry. For more than 60 years, GTI has been meeting the nation's energy and environmental challenges by developing technology-based solutions for consumers, industry, and government.

The UK Gas Crisis 2005 - 2007

Saturday, November 11, 2006

Ofgem Meeting Monday

Amidst warnings of a number of cold spells the Chairman of the Independent Energy Scrutiny Panel (John Hemming MP) is to meet Ofgem on Monday to press for action to ensure that the UK imports more gas from Europe so that gas stores are not used up.

"Over the recent cold spell", said Mr Hemming, "the country started using stored gas both from long term and medium term storage as soon as consumption went over 290 mcm/d. This is far too low. Only about 7 mcm was imported via Belgium. Considerable quantities of gas are coming in via the new pipeline, but the gas we should get from the Continent is not flowing sufficiently."

"This creates the hazard that supplies will be constrained in cold spells. Langeled's import levels indicate that gas we previously obtained via the interconnector is now coming via Langeled. "

"I am still trying to get figures for the imports via Vesterled which comes into the Total subterminal at St Fergus. We have some figures, but cannot reveal the source. The Norwegians are refusing to consider providing us with information unless we reveal our sources. We are not willing to do that. A proper transparent market requires that information."

"With electricity generation from Nuclear Power way down this winter it has been difficult to predict how much safety margin the country has. There are two key variables. One is gas imports from the continent and the other is the weather. The weather warnings are now worrying. The imports from the continent are also worrying. "

"I am meeting Ofgem on Monday to discuss the issue of the use of gas from storage in preference to import. I take the view that they should launch a formal competition inquiry to encourage those companies that straddle the channel to import gas rather than take from storage."

Christmas Lights – Safety Tips

- If putting lights outside, check they are safe to use externally and are in good condition.
- Use a Residual Current Device (RCD) to automatically disconnect the power in the event of a fault. An RCD is a good safety device for Christmas lights outdoors and indoors.
- It is a good idea to use low voltage Christmas lights. These have transformer that reduce the voltage going into the lights from 230 volts to 12 volts, reducing the risk of an electric shock if there is a fault with your lights.
- Use *waterproof* exterior power plugs supplied from an RCD.
- Fully unwind extension cords to avoid overheating and a fire risk.
- Don't put more than one plug or double plug into a power point or extension cord outlet. Be careful not to overload power points or multi-boards. Too many plugs in a single power point can cause a fire.
- Make sure outdoor lights are securely attached to trees, house walls or other firm supports to protect the lights from wind damage. Use specially insulated staples or clips to hold strings of lights in place (not nails or tacks), and mount them out of reach.
- When you replace lamps, use lamps of the same voltage and wattage. If the voltage or wattage of the replacement lamp is too high, it could overheat and start a fire.
- Always switch off and unplug light strings before replacing lamps.

Email addresses

If you received this newsletter by post, we don't have an email address for you on our database. If you have email, please advise Bill Miller so we can add this to our list.

Email enables us to communicate quickly and cost effectively with our members.

Change of details

Could all members please ensure that any changes to contact details - address, phone no's, employer, email etc are notified to IPENZ so we can keep our membership database up to date.

We currently have a number of members that we can't contact due to incorrect details. If you know of anyone who hasn't heard from us recently, please get them to contact Bill Miller with their updated details.

NZIGE Council

The members of the NZIGE Council as elected at the AGM are:

Craig Muirhead President Peter Thorley Past President Dan Hynson Representing Corporate Members Geoff Brown Representing Associate Members Geoff Evans Vice President Bill Miller Secretary/Treasurer Gerry Thompson Representing Corporate Members Ian Gallaugher Representing Associate Members

Contacts

When mailing anything to NZIGE please use the IPENZ address – NZIGE PO Box 12241 Wellington.

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Our Website: http://www.nzige.org.nz/

