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## New Zealand Geothermal Association (NZGA) News : 23 September 2015

Dear Members and friends, welcome to this issue of the NZGA Newsletter!

### President's Report

A warm welcome to the NZGA September Newsletter.

In this newsletter we will look forward to the upcoming events at Wairakei in November, introduce you to the GeoHeat strategy if you haven't already been introduced and contributed, as well as reflecting on the success of the 2015 World Geothermal Congress (WGC) in Melbourne.

#### To Melbourne 2015 WGC first.

I wonder if you have reflected on the event which is now a number of months ago. If not pause a moment and reflect ..... How good was that!

It was tremendous to have the full support of Hon Simon Bridges, Minister of Energy and Resources in and around the time of the Congress; address at the Congress opening, hosting the NZ lunch meeting, the ministerial press conference, joining the Rotorua event as part of the gatherings back in NZ after the Congress, and for his enthusiasm for renewable energy.

My reflection glows in satisfaction of an awesome display by the team in black. As President of the Association I wish to thank you for your contribution to the 2015 WGC; the Melbourne events, the short courses, side meetings and the field trips.

A legacy remains with the International Geothermal Association as the ceremonial hoe is passed from host nation to host nation as part of WGC tradition.

These were outstanding events in which New Zealand Geothermal was brilliantly show-cased. Thank you.

#### GeoHeat Strategy

This strategy is targeted at New Zealand achieving our direct geothermal energy use potential. Read more on the NZGA website [http://www.nzgeothermal.org.nz/geoheat\\_strategy.html](http://www.nzgeothermal.org.nz/geoheat_strategy.html).

There have been consultation meetings assisting in defining the strategy and refining the thinking. Please take time to fill in the on-line questionnaire or email [info@geoheat.org.nz](mailto:info@geoheat.org.nz) if you have aspects that you would like the strategy working group to consider.

The online questionnaire is web accessible at : <https://www.surveymonkey.com/r/NV8G2BR>

#### 2015 New Zealand Geothermal Workshop

##### The Next 10,000 Megawatts

18<sup>th</sup> – 20<sup>th</sup> November at the Wairakei Resort Hotel, Wairakei.

Registration is open and early bird closes on 1<sup>st</sup> October. Save yourself 25% and register early.

<http://www.geothermalworkshop.co.nz/registration-2/>

For more details see <http://www.geothermalworkshop.co.nz/>

#### 2015 NZGA Annual General Meeting

The AGM will be held on 19 Nov 2015 at the Wairakei Resort Hotel in association with the New Zealand Geothermal Workshop. The meeting will start at 5pm and the room venue at the Resort Hotel will be advised later.

### WHAT'S IN THIS ISSUE?

- *Welcome*
- *Board election results*
- *National news*
- *Information*
- *Membership*
- *Events*
  - a. *New Zealand Geothermal Workshop*
  - b. *NZGA – Annual General Meeting*

As part of the Annual General Meeting I will be relinquishing my Presidency of the New Zealand Geothermal Association. I am appreciative of your support for the Association. It has been a pleasure to serve you and satisfying to have enjoyed the role.

Enjoy the rest of the Newsletter read.

Thank you

**Brian Carey**

**President New Zealand Geothermal Association**

**September 2015**

## NZGA Board Election Results

We are pleased to announce the Board election results:

- Jane Brotheridge and Kevin McLoughlin re-elected.
- Bridget Robson (Eland) elected, having previously been an observer to the Board.
- Rosalind Archer (University of Auckland) and Abbie Dean (WinG representative) elected as new members to the Board.

Congratulations to the successful candidates.

We would also like to thank Boaz Habib (HERA) and Alec Wilson (Waiariki Geothermal Maori Advisory Group) for standing for election to the Board – Thank you.

## NZGA Board and Election Material

The NZGA has a policy of Board rotation in which about a third of Board positions are made contestable each year. There are also rules around compulsory retirement after two consecutive three-year terms. While this means changes are always in the wind, it also ensures some continuity of leadership. Board changes are effective from the AGM.

This year Brian Carey (President) and Chris Mann retire (Brian will stay on as Past President). Jane Brotheridge (Secretary) and Kevin McLoughlin (Treasurer) were up for rotation and have been re-elected.

For the first time NZGA Secretary, Jane Brotheridge secured the support of IGA for electronic voting. Members could vote for up to 5 of the 7 available candidates. This was a resounding success with nearly 50% member participation (170 of 349 members) (nearly twice as many voters as the last election), most of whom voted on the first day with another 40 following a prompt. Thank you for your participation. We will be using electronic voting as part of our future elections.

## National News

### Quarterly record for geothermal electricity generation

MBIE's Electricity Quarterly has just been released and shows a new geothermal record for generation of 1872 GWh for the quarter (17.7% of total generation) – see [http://www.mbie.govt.nz/info-services/sectors-industries/energy/energy-data-modelling/publications/new-zealand-energy-quarterly?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=energy-news-newsletter](http://www.mbie.govt.nz/info-services/sectors-industries/energy/energy-data-modelling/publications/new-zealand-energy-quarterly?utm_source=newsletter&utm_medium=email&utm_campaign=energy-news-newsletter)

### Major thermal plant closure announcement

Recent months have seen announcement of impending major thermal plant closures. These include:

- Huntly Power Station (Genesis) - remaining 500 MW Rankine units – to be retired by December 2018 [https://www.genesisenergy.co.nz/web/genesis-energy/genesis-news-item/-/asset\\_publisher/SXj7PCBceFc2/content/genesis-energy-limited-gne-announces-timetable-to-end-coal-fired-generation-in-new-zealand?\\_101\\_INSTANCE\\_SXj7PCBceFc2\\_read\\_more=true](https://www.genesisenergy.co.nz/web/genesis-energy/genesis-news-item/-/asset_publisher/SXj7PCBceFc2/content/genesis-energy-limited-gne-announces-timetable-to-end-coal-fired-generation-in-new-zealand?_101_INSTANCE_SXj7PCBceFc2_read_more=true)
- Otahuhu B gas fired station (Contact) – 400 MW – to be retired by September 2015 <https://www.contact.co.nz/cenergymedia/contactenergy/files/pdfs/corporate/cen-close-otahuhu-power-station.pdf>
- Southdown gas fired station (Mighty River) – 140 MW – to be retired by December 2015 <http://www.mightyriver.co.nz/Media-Centre/Latest-News/Renewables-growth-behind-closure-of-Southdown-ther.aspx> (Note that after this closure, Mighty River will have a 100% renewable electricity generation portfolio.)

All of the company media releases mention the role of renewables including geothermal energy in bringing about the retirements, together with the flat electricity demand. Retirement of plant will take out current surplus capacity, allowing price signals to eventually move through the market to trigger new more appropriate plant.

### **Top Energy has consents for Ngawha expansion**

In mid-September, Top Energy was granted consents for the further staged development of the Ngawha geothermal resource by the Northland Regional Council and Far North District Council. The project could see two 25 MW Ormat units added to the units already operating. Top Energy has also purchased land for a possible industrial park utilising geothermal heat. A cooperation agreement has been reached with the Ngawha Marae Komiti, but there is still some tension with other groups. The Top Energy Board will now be looking for right market conditions to proceed. See <http://www.nrc.govt.nz/News/news-2015/september/consents-granted-for-ngawha-power-station-expansion/>

### **Eastland aims to complete Te Ahi O Maui in 2018**

In early-September the Eastland Community Trust, sole shareholder of Eastland Group, cleared the Te Ahi o Maui 20 MW geothermal development at Kawerau to proceed. Eastland is working in partnership with the Kawerau A8D Whenua Trust. The \$100 million project can be funded off Eastland's balance sheet.

Eastland Group will continue to negotiate with suppliers, but has already secured consents. This project will be developed around well KA22, though one additional production well and two new reinjection wells are planned. Discussions will be held with suppliers and, assuming favourable prices, new wells could be spudded in as early as April 2016 with commissioning by the end of 2018.

<http://www.eastland.co.nz/eastland-group/news-and-media/eastland-group-gets-green-light-for-next-geothermal-power-station/>

### **Mighty River plans next geothermal drilling**

Mighty River will start a new drilling campaign next year for Rotokawa and Kawerau fields, running for two years. These wells will be for make-up purposes including well workovers and new wells for both production and reinjection. <http://www.energynews.co.nz/news-story/21981/mighty-river-plans-next-geothermal-drilling>

### **Contact Energy letter to shareholders**

Contact Energy has just released a letter to shareholders which succinctly outlines current market issues and the role of geothermal energy within Contact's generation portfolio. <https://www.contact.co.nz/cenergymedia/contactenergy/files/pdfs/corporate/cen-fy15-shareholder-letter.pdf>

### **News from GHANZ**

The Geothermal Heat-pump Association of New Zealand continues to thrive. For its latest newsletter see here - <http://www.nzgeothermal.org.nz/GHANZ/documents/Newsletters/GHANZ-Newsletter-Issue9-September2015.pdf>

### **News from WING (Women in Geothermal)**

Hello from your WING NZ Team! Many of you know who we are by now. We're rather good at shouting that from the roof tops. Yes, we are also good at throwing parties, but that's not all we do. We're here to support the education, development and advancement of women in our industry.

A couple of facts relevant to NZ women who are our colleagues, wives, friends, daughters and nieces:

- In 2014, the gender pay gap in NZ was 9.9%. This equates to women earning approximately \$300 less per week. That's in 2014 not 100 years ago.
- Women are currently under-represented in leadership roles in New Zealand with a significant number of highly experienced women leaving the workforce, or unable to get past senior management roles and move into top leadership positions.

We want to help our industry become a place of strength for women and in turn strengthen the industry as a whole.

WING NZ is part of the Global WING group – with approximately 500 members internationally so far, our goal is to have 1500 members by 2020 which will make us the largest geothermal association on the planet. Our

aim is to have 50% male membership too. We need hands helping us over the void - we can't do it on our own.

Watch for, attend and support WING events, join WING (yes you dudes too) and take a moment to look around and think about how you can support the women you work with. Why don't you ask them how they would like to be supported?

If you have any questions about WING or wish to join, email me at: [Abbie.Dean@contactenergy.co.nz](mailto:Abbie.Dean@contactenergy.co.nz) or our group email: [info@womeningeothermal.com](mailto:info@womeningeothermal.com).

First they laugh at you, then they ignore you, then they fight you, then you win' – Mahatma Gandhi

Abbie Dean  
WING NZ Ambassador

### **NZS2403:2015 Code of Practice for Deep Geothermal Wells**

There has been great industry cooperation on the Code of Practice for Deep Geothermal Wells, and we expect this to continue to be an international best practice reference. This can be purchased from Standards New Zealand now. See [http://shop.standards.co.nz/default.htm?url=web-shop/&action=viewSearchProduct&pid=2403:2015\(NZS\)&mod=catalog](http://shop.standards.co.nz/default.htm?url=web-shop/&action=viewSearchProduct&pid=2403:2015(NZS)&mod=catalog)

### **Dick Glover**

We regret to inform people that Dick Glover has passed away. An obituary will be included in the NZ Geothermal Workshop Proceedings for this quiet but passionate pioneering geochemist.

## **Information**

**Some Board news** – The NZGA Board met in June. A few of the issues that were considered:

- Our renewed commitment to supporting the Asia Western Pacific Regional Branch of IGA
- Sponsorship of the NZ Geothermal Workshop
- AGM date set as 19 November 2015 during the Workshop
- Board nomination process (outlined above, along with results)
- Future focus of the Association – with the World Geothermal Congress complete and a changing national market, the Board needs to rethink the Association vision and focus, and the corresponding Action Plan. A decision has been made to hold a facilitated discussion with the new Board and President next year.
- Recognition of major contributions to the industry – The Board has decided to :
  - Recognise Mike O'Sullivan as a Life Member of the Association.
  - Develop association awards that will recognise contribution to the NZ geothermal sector such early pioneers, contribution to NZGA, or pioneers of new activities. Concepts for this are still being developed.
- Geothermal well control course – Drilling experts have pointed out the mismatch between content of compulsory drilling courses (to receive the A-Grade Bore Manager's certificate) based on oil & gas practice, and what is considered as good practice in the geothermal industry. Ralph Winmill is proposing to develop content for a "geothermal well control course" as a supplement to this course. A subcommittee is to support Ralph in this work.
- Visibility of NZS2403 – The NZGA would like to hold a 2-hour short course on the new Code of Practice for Deep Geothermal Wells on the day before the NZ Geothermal Workshop. Details are coming on our website under upcoming events.

**Major Hazards Regulations** – On 17<sup>th</sup> July representatives from NZGA, Electricity Engineers Association (EEA), Contact Energy and Mighty River Power met with representatives of Ministry of Business Innovation and Employment (MBIE) and WorkSafe. This was to discuss the accidental capture (through reference to Seveso III standards) of most geothermal binary cycle plants under the strictest safety regimes within the latest draft of the Health and Safety at Work (Major Hazard Facilities) Regulations. This followed earlier submissions which emphasised the need for regulatory regime to be proportional to risk.

Unfortunately exemptions were not possible, though we still wait to see if there may be some relief from regulatory duplication due to binary cycle plant being regulated by Major Hazards regulations and the Electricity Act (and there may be overlaps with new Geothermal Regulations). Most geothermal binary cycle plant will now require Safety Cases to be prepared. Combined High Hazard/Major Hazard high level inspections of geothermal plant will now take place and staff present will be briefed on requirements ahead of regulations coming in to force.

We will now watch carefully to see the details of the new Geothermal Regulations.

## NZGA Membership Details

NZGA currently has 351 members. Welcome to the following new members:

- **Penny Doorman** – Bay of Plenty Regional Council
- **David Allen, Peter Owles, Patrick Mulligan** - of Buddle Findlay
- **James Hawkes** - Hawkins Infrastructure
- **Christo Umanzor** - of Jacobs
- **Atilla Gaal** – La Trobe University, Victoria
- **Daniel Patten** - McConnell Dowell Constructors
- **John Clark, Michael Stevens** - Mighty River Power
- **Philip Irapue, Conrad Kumul, Ronald Verave** - Mineral Resources Authority, PNG

- *See who our Corporate and Institutional Members are [here](#).*
- *More details on membership benefits, fees and application forms are available [here](#) on the NZGA website.*
- *NZGA operates 8 Interest Groups – find out how you can get involved [here](#).*

- **Kennie Tsui** - Ministry of Business Innovation and Employment
- **Courtenay Sang** - Quest Integrity
- **Jahvis Davis, Blair Millar, James Warbrick** - Whakarewarewa Thermal Village Tours
- **Trevor Robinson**

We would like to acknowledge Whakarewarewa Thermal Village Tours as a new Bronze level Corporate Member. NZGA relies on membership fees in order to exist and to promote and provide services to the sector. The support of our members is much appreciated. Thank you.

### EVENTS – 2015

**November 2015** **New Zealand Geothermal Workshop**  
 Venue: Wairakei resort, Taupo  
 Theme: The next 10,000 megawatts. For details see <http://www.geothermalworkshop.co.nz/>

### NZGA Annual General Meeting

**19 November 2015, 5pm NZGA AGM**  
 Venue: Wairakei resort, Taupo

NZGA produces this Newsletter primarily for the benefit of its members and also for the wider public. We are happy for the material in the newsletter to be used but ask that the NZGA Newsletter be acknowledged as the source. We are always keen to promote our members and their project activities – please contact us with your news, vacancies or useful materials.

#### KEEP IN TOUCH –

**If your contact details change – let us know –**  
[Email the NZGA Executive Officer](mailto:info@nzga.co.nz)