

CurrentAffairs

News and views from Ergo Consulting Ltd

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Tackling the skills shortage

It was good to hear a senior staffer from Immigration NZ the other day confirming that the service is still giving priority to candidates on the national skills shortage list... He quoted "doctors, nurses, teachers and *electrical engineers*". We certainly need to keep adding to the nation's pool of talent, given current levels of growth and demand in the industry. At Ergo, we've recruited our share from overseas, people who bring great skills but also want to make a new life for themselves in New Zealand.

Hiring and retaining good people has always been a critical requirement – and risk – for any organisation, but it is being keenly felt in the engineering consultancy world at present. Apart from recruiting from overseas and taking on our share of graduates, we've had to come up with other ways to increase the pool of electrical engineers. We recruit from school, from "the trades" and even from the prison service. Although exchanging staff with our competitors does happen, that's not helping New Zealand Inc.

Most people want to have fun at work, have interesting work to do and feel like they are growing as individuals. This is on top of the more basic need of feeling secure – that they can take on a mortgage and support their family. But being able to work flexibly is increasingly a desire for many. This means working where and when they want, for at least some of the time. Already around 25% of our people don't do the standard 8am-5pm working day. Where possible, at Ergo we encourage remote working. Career breaks and OEs are part of the picture. We've opened a Christchurch office and a base in Wellington is likely to be our next step, as we look to widen our catchment area, for both clients and staff. Together with Auckland, these nodes will offer a place where Ergo people can come together for several days a week – but maybe not all five.

This diversification will be part of our next five-year plan. In early 2015 we set out Ergo's "2020 Vision". Time has flown. We've achieved many of the targets that we set ourselves in that plan; as well as some that we didn't. We're optimistic about the next five years, notwithstanding numerous potentially worrying world events that seem to unfold almost daily. Maybe some of those events will persuade some more experienced electrical engineers to head our way.

Richard Cuthbert
Chairman



Project Picks – South Island

Our Christchurch office is going from strength to strength with our client base and workload growing rapidly. Added to this, two of our largest South Island clients are in a busy network growth period. So it's all hands to the pumps!

Jack Stainton and Carla Smith recently visited a 33/11kV substation in Kaikoura that is crucial for Mainpower's supply to the town and wider rural area. With the biggest winter storm on the horizon, Carla (from our more temperate Auckland office) excitedly watched the pouring rain change to sleet and the snow pile up on the side of the road.

Further south, we are in full swing with the 33kV line diff protection upgrade for Aurora, with a tight budget and even tighter timeframes. This project is on track to be commissioned by March 2020. Speaking of tight, the site visit to Clyde Power Station involved five grown men squeezing into the service elevator the size of a refrigerator, to inspect the top of the communications towers.



Dinner at Tasca

A selection of yummy Spanish tapas, washed down with jugs of sangria, was enjoyed by Ergo staff and their partners when we went out for dinner at the Tasca restaurant in Newmarket in August. Apart from seeing who could snaffle the most from the shared plates, it was a good opportunity for new staff and partners to meet the rest of the Ergo team. And less competitive than our upcoming quiz night in October!



New Staff

We currently have 39 people on the books; and we've appointed three graduate engineers who will be joining us in the new year. We remain on the look-out for experienced engineers who can support our growing workload and who we think will be a good fit for Ergo.

We've welcomed four new members of staff to our Auckland office in the last few months.

Jun Su

Jun Su has joined our Power Systems CAD team. Originally from China, he worked for the Fujian Electric Power Survey and Design Institute before completing his tertiary education in the UK, culminating in an MSc in Electrical Energy Systems from Cardiff University in 2014. He is now a PhD candidate at Auckland University of Technology, researching the Smart Management of EVs Charging in Distribution Networks. He enjoys playing basketball and travelling around New Zealand with his family in his spare time.



Rose Jayaweera

Rose joined us from Vector, with six years' experience working for power systems utilities, including risk based asset management and substation projects. She is keen to develop her design skills at Ergo as well as utilising her project management experience. Outside of work, Rose loves getting outdoors and spending time with dogs (she is currently available for dog sitting assignments!).



Mufid Altorok

Mufid is from Jordan and started working in the electrical industry in Saudi Arabia in 2009. He has experience in medium and high voltage substation protection schemes and switchgear, including sizing new substations and upgrading or replacing existing substations. His design work overseas means that he is familiar with international standards such as IEC & ANSI. Mufid relocated to New Zealand in early 2018. His interests include playing chess, swimming and reading.



Peter Kim

Peter has experience in projects across several industries in New Zealand such as power generation, industrial water, oil & gas, mining and food & beverage. He joins us from Worley with particular experience in project delivery, from concept through to commissioning. Peter has worked on a wide variety of projects, from large multi-disciplinary teams to small scale individual assignments. This experience will initially be brought to bear on our Auckland projects but with the prospect of relocating to Ergo's Christchurch office in the next year or so.



Why do engineers get into engineering?

I think it's to tackle challenging problems – and to see things built. When we launched our civil and structural team, the ethos was to have everyone in the team involved in our projects. And to give them a chance to see each stage of the project, from concept through to the construction. Having the opportunity to see what the lines on a drawing mean in reality is great education for young engineers. Importantly it gives them a real sense of achievement, knowing that their hard work is making a difference.

Recently members of our team went out to Pokeno to witness precast panels being installed at Counties Power's new Pokeno substation.



Pokeno substation has been a fast-paced project. We were engaged by Counties Power to meet a very challenging timetable, driven by the requirements of new residential, commercial and industrial development in the area, south of Auckland. The project will house two 110kV transformers, 110kV GIS indoor switchgear and 22kV switchgear within a two level 500m2 building.

Ergo has been responsible for the civil, structural and electrical design, inputting to the electrical equipment specification, assisting in the tender stage (appointing the civil contractor) and providing 'engineer to contract' services during construction. Key features of our work have involved developing a design that would be quicker to build; evaluating different ways of tendering the project; and adopting construction techniques that would de-risk the project and lead to works completion in a shorter time frame.

Counties' decision to involve Ergo as their engineering consultants in a true and trusting partnership has paid dividends in good engineering design and successful project delivery. Close working between Counties and Ergo team members has led to a smooth relationship and better outcomes for all concerned. For the Ergo team, this involvement has generated a feeling of shared project ownership and motivated us to go the extra mile.

It has been 12 months since we started up our civil and structural team at Ergo, and thanks to our clients we have had a really enjoyable year, delivered some great projects and had some fun into the bargain. It's been a terrific start. Now we're looking forward to the next stage – expanding the team and widening our sphere of activities.

Steve Gaskin

Head of Department, Civil and Structural