

Trustpower's Safety Climate Experience

Executive Summary

Trustpower has H&S systems that meet all typical requirements which include:

- Leadership sign off to ensure senior management commitment
- Health and safety pledge
- A strategy to develop health and safety
- Regular H&S meetings with employee participation
- A vast volume of safety related compliance requirements.

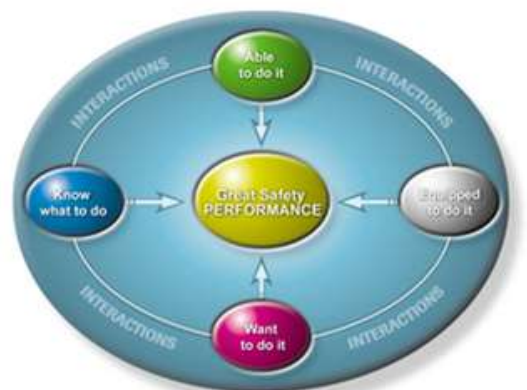
But we strive to be more than this!

We are working towards building and maintaining a culture where 'safety is how we do business around here'. A critical part of this is our Great Safety Performance (GSP) programme for our high risk field staff. These are the people that face real significant hazards each day.

In 2011 Trustpower embarked on the Safety Climate Project lead by the Electricity Engineers Association (EEA) to take our safety culture to a new level. Two years later we have seen visible gains in our safety culture, with our field staff fully engaged and active in contributing to continual improvement of our safety systems. The EEA Safety Climate Project and our Great Safety Performance programme are underpinned by the evaluation information, tools, and processes provided by Orange Umbrella®.

The GSP programme identifies key areas that contribute to our individual and collective safety, namely;

- Knowing what to do
- Being able to do it
- Being equipped to do it
- Wanting to do it
- Safe work actions
- Interactions



This programme has involved all of our field staff completing annual surveys that provide direct feedback as to how they view the safety climate in not only their team, but Trustpower in general. The survey is then followed up with team workshops which explore the results from which we develop actions for improvement. We then have regular follow ups to ensure those actions are making progress with the parties assigned the task held accountable.

To highlight our success it would be easy to list the many improvements we have made and the things we have introduced since the implementation of this programme. But that would be missing the true value of what we as a team and company are achieving. Often when companies say we “enabled” our staff to take health and safety seriously, in reality they have simply “told” staff to take health and safety seriously; instructions are written, policies are implemented and measures are put in place. Whilst these things have their place, this approach alone does not equate to enabling staff to be safe.

The manner in which we have adopted the GSP programme is enabling of our teams to manage their own health, safety and wellbeing. Field staff now have a platform to present their views, anonymously or directly, to Senior Management. In return they have been empowered to make any necessary improvements, and are now keenly engaged in the process. This means health and safety is increasingly being driven by the people in the front line. We now have a culture where the staff actively contribute and drive our health and safety programme, with a level of support and guidance from the business.

About Trustpower

In New Zealand, Trustpower owns 36 small to medium size Hydro Generating Stations and two Wind Farms, with a further Wind Farm in South Australia. We produce electricity from renewable sources and our power stations produce enough electricity for around 220,000 Kiwi households! Trustpower has its head office based in Tauranga and employs over 500 people in New Zealand.

With assets of over NZ\$2 Billion, Trustpower is majority New Zealand owned and is listed on the New Zealand stock exchange.

GSP Process

GSP is not just another survey. The survey simply kick-starts the conversation to help determine the organisation’s safety climate and provide topics to explore during workshops. The opportunity for staff to talk openly about safety related issues is the critical aspect. Having an external party assist with the process and facilitate the workshops is what makes GSP successful. Representatives from each workshop are then given the responsibility not only for being the champion for the people they are representing, but for pushing forward the matters important to their people and combining the information from the other workshops to create a sensible action plan.



The Survey – there are approximately 100 questions categorised and run by an external organisation to maintain integrity of the survey. Examples of questions include:

- For every task I perform I check all tools, equipment, machinery and vehicles to ensure they are in good working order before I use them.
- In my work or workplace I am clear about my company's expectations and standards for working safely.
- In my work or workplace I understand how my work team's safety performance is measured.

Question responses are recorded using an agreement scale from “Strongly disagree” or “Almost Never” through to “Strongly Agree” or “Almost always”.

The data is collated and turned into a percentage agreement result and presented graphically during the workshops to all staff.

The Workshops - these start with an executive meeting for the senior staff to look at the survey results data and propose questions to be used during the staff workshops.

Staff workshops take place in a safe environment without retribution, recording the key points of discussion on flipcharts where all staff must agree to them before they are documented in a report for the action planning meeting.

Action planning workshop includes one representative from each staff workshop, key senior management staff including our Chief Executive and a facilitator. The action planning workshop reviews the outputs from all prior workshops and determine the most important issues that need immediate attention. An Action Plan is then created from this which indicates timeframes, resources and responsibilities.

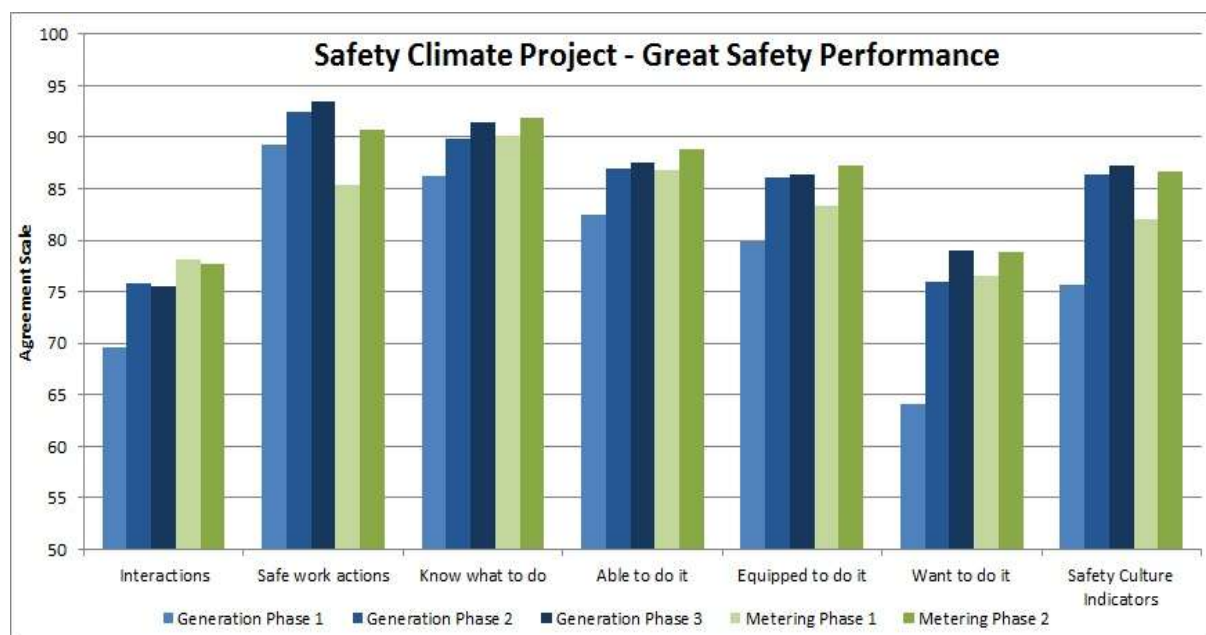
On-going Activity – GSP Reps provide feedback on the action plan to their peers in the field, and regular action plan follow up meetings take place where updates on tasks are provided and accountability is determined. The full phase of surveying, workshops and action planning is then repeated annually.

The Indicators of Success

The process provides a variety of positive performance indicators and shown below is a summary of the details Trustpower uses as well as some other indicators that have significantly impacted by Trustpower taking part in GSP.

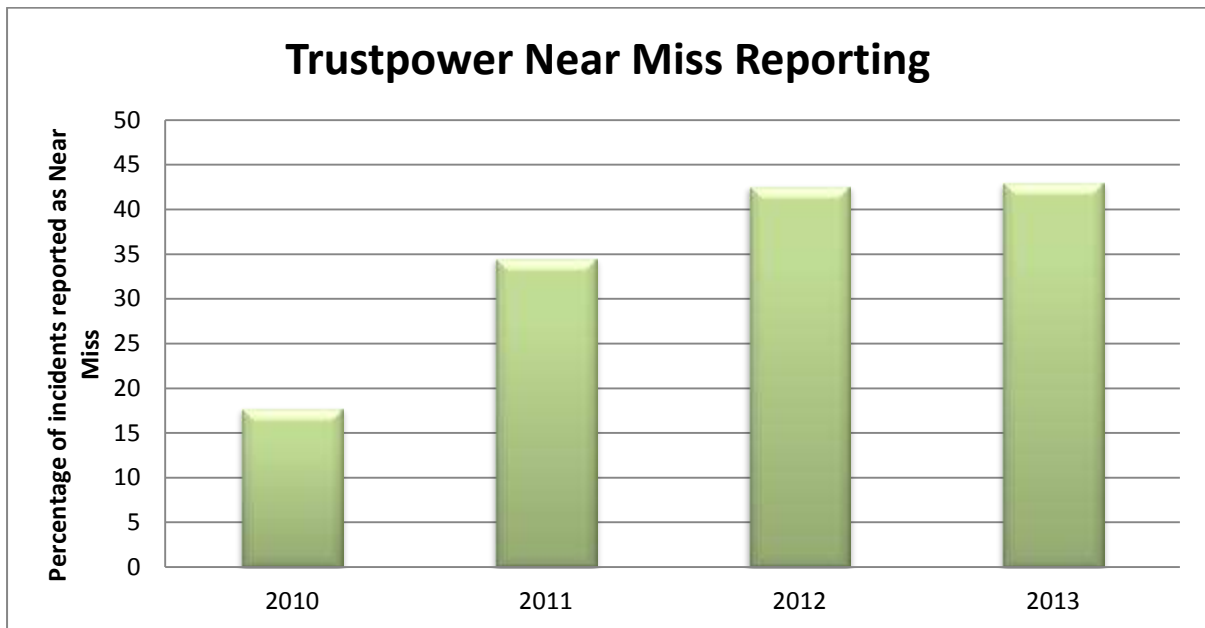
GSP survey results – category summaries

The following graph is a summary of the survey results in categories. The blue lines represent the three phases completed by the Generation team field staff and the green lines represent the two phases the Metering team field staff. Significant gains were made in almost all categories and overall performance has been positive.



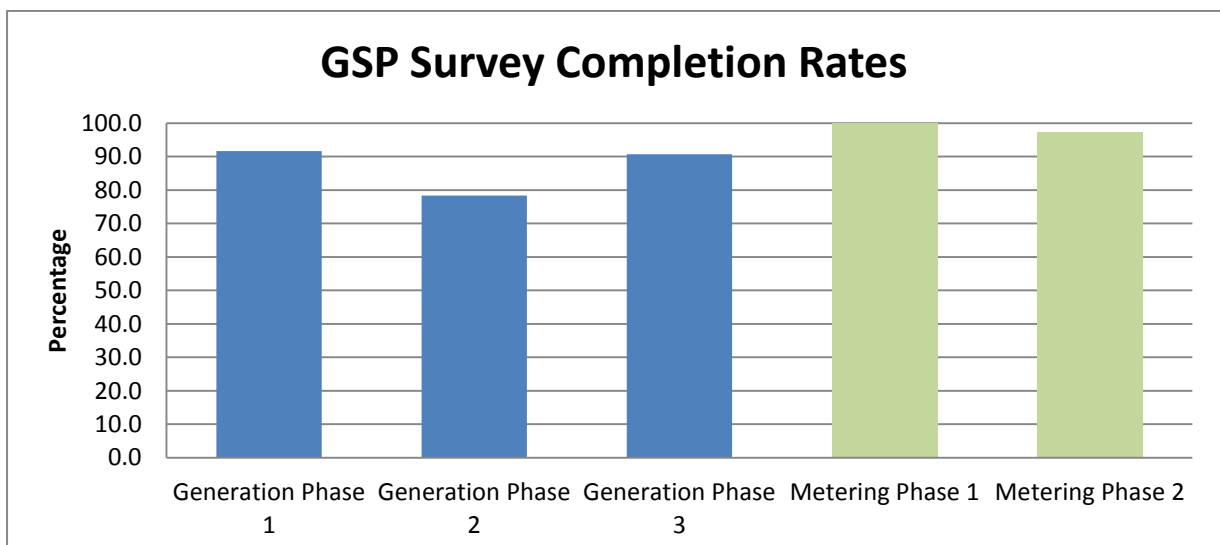
Near Miss Reporting

A truly mature safety culture identifies near miss incidents as a positive indicator, and the increase in reporting of near miss situations shows that the person reporting understands that there is a benefit in doing so. Several examples of near miss incidents reported have occurred where an individual had a moment of absent mindedness. Nobody would have known the incident occurred had they not reported it. This is clear evidence of a thriving safety culture. Below is a graph showing the percentage of near miss incidents reported out of all incidents reported in total. We still have room to improve but change over the past three years is a really positive sign.



Survey Completion Rates

This shows the commitment and value that staff see in the process, with high completion rates in latter phases indicating significant belief in the value of completing it.



Operational Benefits

An important measure used within the Generation team is the number of failed starts that occurred with our hydroelectric generators. Obviously the less failed starts the better and since the introduction of GSP we have seen a reduction in these. It could always be coincidental, but we do believe with better safety comes better quality, particularly with preventative maintenance.

GSP Output Initiatives

The true output from the workshops is actions and initiatives to improve safety. Captured below are some of the many initiatives that have been implemented to date.

“OSHIT” Cards – One success story was the initiative around improving incident reporting, particularly near miss incidents. A quote from one workshop was “I won’t report an incident if I take a bit of skin off my knuckles” and “what form do I use if it’s not a major incident”. The conversation eventually got to a point where we agreed that any situations where a staff member has a loss of control and said to themselves ‘Oh shit’ then it should be recorded. One of the other staff then came up with an acronym to match that statement Occupation Safety and Health Incident Template or for short the “OSHIT Card”.

The image shows a form titled "HEALTH & SAFETY Occupational Safety & Health Incident Template (O.S.H.I.T.)". The form is designed for reporting incidents and includes the following sections:

- Header:** "HEALTH & SAFETY Occupational Safety & Health Incident Template (O.S.H.I.T.)".
- Incident Information:** Fields for Date, Time, Name, Location of injury, Type of injury (with checkboxes for Head and Back), and Damaged Property.
- Description:** A section for "Describe what happened" and "What were the causes of the accident?".
- Investigation and Action:** Fields for "What initial corrective actions have been taken?", "Any treatment required?", "Formal investigation carried out?" (Yes/No checkboxes), and "When action has or will be taken to prevent recurrence?".
- Reporting:** Fields for "Lost Time" (Yes/No checkboxes), "Permanent Injury?" (Yes/No checkboxes), and "Staff member signature" and "Reported to".
- Footer:** "Return form to Health and Safety Manager" and the "TrustPower" logo with the tagline "SAFETY IS EVERYONE'S RESPONSIBILITY TO PROGRESS".

Communication – regular newsletters were confirmed as being critical communication to regional staff, and regular contributions are gathered from those in the field to produce internal communications that are inclusive and educational.



IF IT'S NOT SAFE –
DON'T DO IT –
SOMEONE EXPECTS
YOU WORK
TODAY

Recent incidents

330V Near Miss

A TrustPower staff member's hand brushed past a terminal block and nicked the hair on the back of his hand while standing on a wire.



On closer inspection they found the pollution with the terminal connected too tight for terminal block and the wires were protruding (beyond) the end of the terminal. Many of our older installations are potentially like this so worth having additional care to ensure this scenario is not common elsewhere.

The handbrake incident

Just recently we had a second incident where a vehicle has been left without the handbrake fully on, the location where it was parked has only a minor slope but it was sufficient to cause the vehicle rolling backwards and hitting a barrier. It's one of those situations where the driver had more than one thing on their mind and was in 'autopilot'. We must ensure when we are operating any equipment or performing any task we keep our mind on the job at hand and keep ourselves and our workmates safe.



Right tool for the job

A minor incident was reported where a staff member slipped while using a screwdriver. The screwdriver was not the right tool for the job and the result of this was a small puncture wound in the hand. This is an easy fix, making sure we do think about the task and make sure we are using the right tool for the job and if there is a risk of slipping, gloves can be used to protect your digits.



Feedback on Training Courses

Within the industry, there are various courses providing the same type of training, whether it be confined space, working at heights or the various industry requirements. It's important we know what training providers are going to undertake, training as well as those that we need to ensure our use of. If you have been to a training course recently and found it to be good or otherwise it would be great if you could pass this on to your Portfolio Manager or to Angus Bell.

Recent Incidents (cont.)

Roof fall

Our staff at Cobb station came across this as they finished up and headed home for the day. You can imagine what might have happened had the thing been wrong, if you come across any slips be careful as there is the possibility that more will be dislodged as a result of the initial slip.



Location to finger

When lifting a floor plate, a staff member received a cut to their hand from some sharp springs on the grating. Roped handles have been installed to make the job easier and safer.

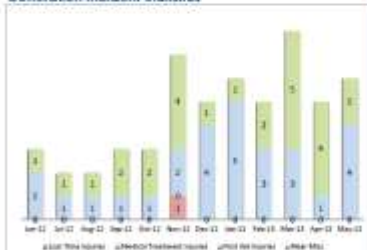
The big road hazard – the other driver

We have had more near miss incidents involving other road users. It's a common theme and shows how important it is that we do keep alert when driving on the roads and drive defensively at all times. Other road users are a major hazard that are difficult for us to control. The best we can do is ensure our behaviour is safe. For those of you who regularly drive company vehicles, you are all registered with www.alarthrive.co.nz so you can refresh your knowledge on how you can drive to keep safe.

Great Safety Performance (GSP) Update

Phase 2 of the GSP programme has just kicked off and in this phase we have included Operations. Current staff and some of our key Contractors. The next, the Arnie Generation staff will be included in the safety and workshops. You should all have received a survey from George (Lindsay), making you to participate. Please ensure you take time to complete the survey so we can see how we move forward with safety workshops with the operations team. The survey will close on 13th of June and the workshops start next week.

Generation Incident Statistics



Here we can see in recent months our performance has been really positive with only minor incidents taking place. Obviously any injury is not good but we take it as a real positive that we have not had any medical treatment injuries or other incidents that have resulted in staff not being able to work for a month or more. While this is great stuff we must ensure we do not get complacent and drive to keep our workplaces safe and continuously improve what we do.

Did you know?

A Christchurch company was fined \$2,000 after a worker fell off a stepladder that was being used on the top level of scaffolding. The fine was reduced to \$15,000 due to the financial difficulties the company faced.

Personal Protective Equipment (PPE) – inconsistency was found during the GSP workshops where not all staff have the same PPE gear or did not what was available to them. We now have clarity with all teams knowing what gear should be available to them and clear understanding of if you do not have it, ask for it and it will be provided. The workshops also provided feedback on the quality of the PPE gear and we now have better 'fit for the purpose' and specific to the conditions faced out the field.

Training – an evaluation process was started from the GSP programme to capture the quality of all the various training providers that Trustpower uses across the country to ensure when new training is scheduled, that it is with the best possible training provider for our needs.

Technology – using new technology to address safety concerns. In the past we have had software upgrades that removed some safety functions and information that was critical for our field staff. The GSP programme was used to voice this issue and ensured a speedy resolution.

A second technology solution being implemented that has been actioned out of the GSP programme is the installation of smart metering technology for meters that are positioned in dangerous locations, removing the need for a person to access that meter and put themselves at risk of harm.

Safety Goals – Each team has developed its own safety goals to help drive performance. These goals are aligned with Trustpower’s Safety Improvement Plan and overall Health and Safety strategy.

Vehicle specifications and equipment – review of all new vehicle purchases are to have a minimum of ANCAP four star rating of new vehicles. Equipment for each vehicle standard with safety cages, first aid, fire extinguishers, snow chains, tow rope, etc



Conclusion

Trustpower has shifted its focus from primarily health and safety compliance towards behavioural safety. There will still be a level of compliance focus but this is balanced with understanding human factors and the impact this has on safety. This is a long term initiative to improve the safety culture within the organisation by using the staff to own and drive the safety process.

The journey to date has shown significant improvements in positive performance indicators and we believe this will have long term benefits by imbedding safe work values and practices. The output of this is a mature safety culture and result in significant reduction in injuries to our people. This initiative is a long term commitment and we expect to see significant improvements over the coming years as we continue this process.

Angus Bell
Health and Safety Manager
Trustpower Ltd