



DEFERENCE TO EXPERTISE

Who are the experts in work? The people who do it. **PETER BATEMAN** reports on an ongoing critical risk programme which places workers at the centre.

“It’s a long-term project,” explains Northpower’s Ross Wilson. “We identify the critical controls but we pick up gaps in performance we aren’t comfortable with. And your level of comfort changes over time.”

As a commitment to continuous improvement in health and safety this insight would be hard to beat in any industry sector, but particularly in a sector whose workers deal with high voltage live electricity every day, often while working at height and in all weather.

Wilson, the company’s group manager for health, safety and environment, made the observation while discussing

the involvement of frontline staff in designing the company’s revised approach to its critical risks and their controls. The initiative won the Engagement category at this year’s NZ Workplace Health & Safety Awards.

In 2019 and 2020 the company experienced 16 high-potential events, seven of which involved live electricity. Each one of them had the potential to result in serious harm or death. The company had already done work to identify critical risks, but an analysis of these events showed the controls weren’t always being applied.

Wilson says the traditional reaction would have been more education and training, but this was rejected as

unsatisfactory. “We’ve been doing that for our whole 90-year existence as an organisation. Just because people get training doesn’t mean they will put it into practice.”

Instead, the company worked with consultancy HSE Global to identify a draft critical risks/critical controls framework, then significantly amended it to suit Northpower’s own specific needs. It also acknowledged its traditional top-down approach to identifying risks and controls was no longer fit for purpose. It was time to acknowledge workers as experts and to bring them fully into the mix to help develop a new way. The Critical Risk Control programme was born,

THE COMPANY ACKNOWLEDGED ITS TRADITIONAL TOP-DOWN APPROACH TO IDENTIFYING **RISKS AND CONTROLS WAS NO LONGER FIT FOR PURPOSE.**

as a disciplined, deliberately designed strategy.

DISCOVERY PHASE

In what Wilson terms the discovery phase, staff belonging to the company's national safety forum and those belonging to the multiple local safety forums around the country helped define the top ten critical risks to become part of the programme. They also became champions for change, as volunteers were sought to be filmed sharing their stories of being involved in a live electricity incident at Northpower or with a previous employer – as the injured party or as a witness, or a family member affected afterwards.

“This was about the why,” explains Wilson. “We were looking for maybe five or six short videos of Northpower people but we almost couldn't turn them off: what it meant to them, being in a team and observing an incident. We ended up with about 20 videos.”

Some of the videos were screened at a company-wide Stop for Safety day involving all 1200 staff around the country. Workers who had been involved in creating the Top Ten list spoke about their involvement in the project and what they had learned so far about critical risks and controls.

“We could see the lights come on. This isn't one of the senior managers telling us we have to do something. These are our workmates telling us, this is important.”

LIVE ELECTRICITY # 1

First cab off the rank to be tackled was working with live electricity. A working

group was formed under the Safety-II principle of deference to expertise: ensuring the programme was informed and led by crews, not executives. Each regional manager was asked to identify a frontline worker with expertise in live electricity. Over several all-day sessions the group established a complete picture of work-as-done in the field, the current control environment, and the additional capacity needed in the system.

Wilson says what surprised many of the expert workers was that they were already using critical controls but didn't know them in that context: as controls which have to be in place every single time. The working group looked at best practice guides, codes of practice and other established knowledge sources, then added their own hard-won expertise to the mix to come up with a set of Northpower critical controls for the critical risk of working with live electricity.

Too often, he says, people think of controls in the context of specific actions or objects, rather than at a protective system level. For example, it can be difficult to put engineering controls in place when you're in a street digging holes or replacing power poles.

“Taking that system view, it's not necessarily about introducing more controls. It's about us being really clear about the controls we have available to us and making sure those are in use every time.”

PRESENTING THE LEARNING

The working group went on to develop a number of new learning modules on live electricity work and the controls to

keep people safe, and everyone in the company – including office staff – was given the modules relevant to them. Support staff need to be familiar with the risks operational staff are exposed to and the controls to keep them safe.

“They need to know their part in the process and why it is important, like making sure a piece of equipment gets into the field on time.”

How to get all this new information out there? Use the experts – the members of the Live Electricity Working Group, most of whom were frontline workers. They toured all branches and ran roadshows with the new learning modules, which have since been incorporated into the company's learning management system and competency framework.

START WORK AUTHORITY

A new element that came out of this was the replacement of the former Stop Work Authority with a Start Work Authority, an electronic tool, so that staff are confident in not starting a task until they are satisfied all necessary critical control ducks are lined up in a row. Mostly, says Wilson, things are delayed for only a small period until all controls are in place. Only a few times have jobs been stood down and staff returned to base, usually because a piece of equipment – part of a critical control – is missing and can't swiftly be delivered to the team on site.

Importantly, the start work authority facility functions as a pre-work verification, and has helped further engage field staff by placing authority in their hands.



IF THE EXPERTS ON HOW WORK SHOULD BE DONE ARE EVEN SLIGHTLY UNCOMFORTABLE, **MANAGEMENT NEEDS TO TAKE NOTICE.**

Staff are also encouraged to do ‘pushbacks’, in situations where the task continues but something about it – perhaps a necessary workaround – doesn’t feel quite right. No incident need occur. Instead, says Wilson, pushbacks are viewed as important signals of discomfort and are discussed at review meetings. It’s another example of deference to expertise – if the experts on how work should be done are even slightly uncomfortable, management needs to take notice.

CONTROL VERIFICATION

It’s all very well deciding on a set of critical controls and producing learning modules to bring everyone up to speed – but how to check the controls are put in place in practice? Selected experienced staff were trained to carry out field assessments and collectively did more than 1800 to confirm that out in the field, staff were competent in understanding and applying the critical controls decided on by their peers.

In addition, members of the Live Electricity Working Group suggested ways to monitor data to ensure ongoing critical control usage was in good health. The outcome is an electronic system which brings together electrical test status, worker certifications, field check observations, start work authority results and other data which managers can

use as a live dashboard to monitor the capacity of the system to work safely.

Wilson says if the dashboard drifts from green into amber – let alone red – then it prompts conversations about why critical controls are not working to the standard expected. “It could be the control wasn’t available due to a planning issue, or wasn’t applied because not practical in that circumstance. If we can’t get a satisfactory reason we dig a little deeper.”

THE ROAD AHEAD

Two more critical risks – moving vehicles and falling objects – have recently gone through the same process. The next two – public safety and working at height – are now under way. By August or September next year he hopes all ten will have been completed.

Northpower has also learned the value of establishing a dedicated programme lead to drive things along, and on the need to focus tightly on critical risks and their controls.

The success of the programme, he says, is due to the high involvement of staff as subject matter experts. It takes longer but the extra time is certainly worth it.

“It’s a journey each company has to go on themselves. The value is in bringing everyone up to that level.” ■



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