

Top Energy seeing early results from \$200m investment programme

Matt Ritchie on Friday, 16 April 2010 - 13:14

Far north lines company Top Energy is reporting positive results from the early stages of its long term network investment programme, as it seeks to make major improvements to its previously poor reliability.

The Trust-owned company was the worst-performing network in the country in the 2008 and 2009 years, but a determined drive to lift performance initiated last year has seen Top Energy record a big improvement in its reliability figures over 2009/10.

The programme is designed to lift both reliability and security of supply, and will see Top Energy tip some \$200 million into its network over the next ten years.

Work to-date has included a network automation programme, involving installation of new reclosers, line sectionalisers and remote control switches. Work targeting the network's two most common outage causes - vegetation and lightning strikes - has also been carried out.

Chief executive Russell Shaw says the work has reduced both the likelihood of outages, and the likely impact when interruptions do occur.

"The automation programme has split the network up into sections, so less people are affected when there is a fault. But the tree trimming and lightning arrestors mean we are reducing the cause of faults.

"Even if we do have a major storm, because we've taken so many trees out of the lines we believe the impact would be much lower," says Shaw.

The initiatives have helped the company reduce its system average interruption duration index (SAIDI) minutes from more than 900 in the 2009 year, to 366 for 2009/10.

Top Energy has set a target of no more than 350 SAIDI minutes per year over the next five years.

Addressing security of supply issues will be a big focus of the investment programme over the next decade. Shaw says that at present 80 per cent of Top Energy's zone substations do not meet its security standards. The investment programme will see 90 per cent of zone substations meet the standard.

"We had one bird-strike that took out 60 per cent of our zone substations, resulting in 45 SAIDI minutes. It's very difficult to keep the lights on when you're as exposed as we are to single events like that," says Shaw.

The company will be doubling the number of zone substations and 33kV lines.

Over the past year, Top Energy has purchased land and completed the first stage of a new 33kV line in readiness for a new Kerikeri substation site, and completed the design and construction of a new substation at the Mt Pokaka timber mill.

The mill is currently being supplied by a mobile substation.

"What that's allowing us to do in this case is reduce the lead time on transformers.

"It's a customer-driven project. The customer wants to increase production at the timber mill, and using this mobile substation has enabled us to reduce the lead time by about six months," says Shaw.

Preparation work for the commissioning of a Ground Fault Neutraliser has also been undertaken, and the company is awaiting delivery of the unit itself from Sydney.

Top Energy is also working with Transpower to upgrade the two grid transformers at Kaitaia, a process that will take almost two years to complete, and working on getting feedback from Kaitaia consumers on having a second transmission line built.

More staff required

The programme requires building the company's human resources, with around 40 vacancies to be filled across the lines and asset management areas of the business.

Top Energy's existing contracting business will be kept busy with the work, and Shaw says the timing of the programme has been fortuitous, coinciding as it has with a major slow down in contracting work associated with the economic crunch which bit at the end of 2008.

"About half of our work was external work, then the economic slowdown came through and it dropped away almost completely. We redeployed some of our staff into vegetation management, but they are now moving back into lines roles," he says.

The company guaranteed no redundancies last year, and Shaw says had Top Energy not been able to redistribute its workforce redundancies would have run at around 15 per cent.

"Particularly when we know our work programme was going to increase, it just would have been daft to let these guys go. It costs thousands to bring someone in and train them, and when you're looking at bringing in 30 linesmen costs mount up pretty quickly and get quite sizeable," he says.

Customer engagement key

The big improvements Top Energy is targeting in network performance have required a significant increase in lines charges, with the average customer copping a \$15 increase on their monthly electricity bill.

Shaw says the necessary line charge increase was kept as low as possible, with funds to also be raised through operating profits, the sale and lease-back of buildings owned by Top Energy, and bank borrowings.

Profits from the 25MW Ngawha geothermal plant will also make a major contribution.

The company has put 'significant' effort into ensuring customers were fully informed as to why the prices had to increase. The drive included briefing and getting feedback from local MPs, holding customer meetings and business seminars, running advertisements and articles in local media, and mail-outs.

"We monitored the feedback we got, and the result of all of that was we had no letters of complaint, no negative telephone calls, no complaints to the Trust, and no letters to local newspapers.

"The only feedback I got was one customer said we had spent too much money communicating. In effect we probably did more than we should, but people understand what we're doing and why we're doing it," says Shaw.