

Wairere

POWER

STATION



▶ **The Wairere dam is 3.5 metres tall.** It's also 56 metres long – that's the length of 16 elephants walking in a straight row.

▶ **The Wairere dam is what is called a 'gravity dam.'** In a gravity dam, the force that holds the dam in place against the push from the water is Earth's gravity pulling down on the weight of the dam itself.

▶ **The Wairere Power Station was built in 1925.** That's the same year the first working television was produced!

▶ **The Wairere Station was commissioned in 1925** with only one machine. Three more machines were added between 1938 and 1981.

▶ **Every day, the Wairere Power Station** generates around 48 megawatt hours of electricity. That's enough electricity to help 1600 families power all the lights and appliances inside their houses for one day.

▶ **Up to 28,000 litres of water flows** through the Wairere Power Station each second. That's enough water to fill 56,000 500ml water bottles every second.

▶ **The turbines inside the power station** are the massive pieces of equipment that the water runs through in order to turn the water into electricity. Every 15 years

these turbines need to have maintenance done to ensure they keep running well. KCE takes the turbines apart and gives them a tune-up.

▶ **Ever wonder how KCE turns water into electricity?** Water flows through a pipe, or *penstock*, then pushes against and turns blades inside a big turbine which spins a generator to produce electricity. This electricity is then sent through the electricity lines to your home.

▶ **The Wairere Power Station only takes one person to operate it on a daily basis.** However, up to seven people are available to run the plant if an emergency occurs, such as the power going out suddenly.

▶ **A 'Station Operator' is the person who** controls how much water goes through the dam and he can do this simply by typing a few commands into his computer.

▶ **If it floods, Wairere Power Station** will still operate. It has what is called a 'spillway gate.' The spillway gate opens during floods to allow the extra water to flow safely past the power station. This spillway gate can take through up to 110,000 litres of water per second. That's enough water to fill up an entire swimming pool - every second!

It was cool to see you - **thanks for coming by!**

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