

## State-Of-The-Art Computer System For National Grid

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State-owned Transpower has brought into operation a \$70m upgrade of its computer system, from which it expects significant efficiency gains. Systems operations general manager Keiran Devine says the system which controls the national electricity grid computes 40m calculations a second to match energy supply to demand in 5-minute periods. It replaces one installed in 1996 which had many interfaces, and had become almost impossible to develop. Devine says "we were first in the world in 1996 to put in a system like this and we're first in the world to put in a second-generation system. It's a major step, and a lot of our peers are watching what we have done."

The system has been installed by French nuclear company Areva, Wellington information technology firm Fronde, Transpower and other firms. It allows Transpower to plan a week, rather than a day, ahead to ensure there will be enough energy to meet demand and also ensure scheduled outages will not disrupt supply. It will also let Transpower automate the process by which it ensures it is using transmission infrastructure as efficiently as possible. Transpower has been negotiating with the Electricity Commission over how it would recover the expenditure. The company expects its fees from the Commission to cover only about half the cost and so recorded an impairment charge in its accounts.