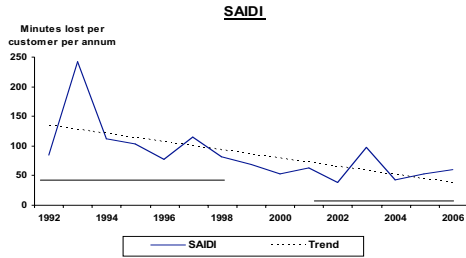




Orion today - reliability has improved

July 25, 07

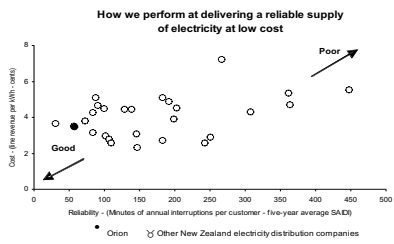


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Orion today – cost versus reliability good

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Security of Supply review



What level of security do customers require?

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SS review – why do we need a review?

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We need to review our security standard because:

- 8 years have passed since our security standard was first developed
- construction labour, safety and compliance costs have increased
- new technology available at reasonable cost
- society/business is more dependent on electricity
- customer attitudes to electricity may have changed
- we need to ensure that investment undertaken by Orion in the next 5-10 years meets the majority of our customers needs/wants.

UK P2/5 underlying philosophy:

"The aim of the electricity industry should be to match its costs of preventing loss of supply to the benefit consequently obtained by customers."

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SS review - the review process

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The review included the following phases:

- 1) Estimate the value of lost load (VOLL)
- 2) Examine alternative network architectures and security standards
- 3) Examine previous customer consultation to determine the likely 'general public' price/reliability preference
- 4) Based on the results of 2) and 3), arrive at a 'most favourable security standard' (call this the 'preferred standard')
- 5) Consult with key stakeholders on the preferred standard and variations to it
- 6) If necessary, modify the preferred standard to ensure the majority of key stakeholders agree (not necessary in the end)
- 7) Implement the new security of supply standard

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SS review - value of lost load

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- how much does it cost customers when electricity supply is lost?
- how much would customers be willing to pay to ensure the power stays on?
- the value of lost load is difficult to calculate because of the wide range of variables; time of year, day or night, customer type, etc
- we have based our VOLL determination on an inflation adjusted review of CAE's 1992 report.
- we removed the agricultural sector and scaled up the industrial sector to reflect smaller scale Christchurch industry (CAE values for industrial were low because of the smelter and timber processing industries in NZ, so used Australian Vencorp study for industrials)

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