

Leading Energy

June 2005

PwC - Utilities Global Survey 2005

'Under Pressure' is PricewaterhouseCoopers' (PwC) seventh annual survey of utility leaders around the world. The survey, which was conducted across 36 countries in December 2004 and January 2005, examines the strategies shaping the boardroom thinking of utilities. It has been based on in-depth interviews conducted with 119 of the world's top ranking industry leaders and investors, including from New Zealand. The striking theme is the continuing need to secure a regulatory and market design framework that can deliver more certainty and security for the massive investment that the industry requires.

Report Highlights:

Investment and supply concerns

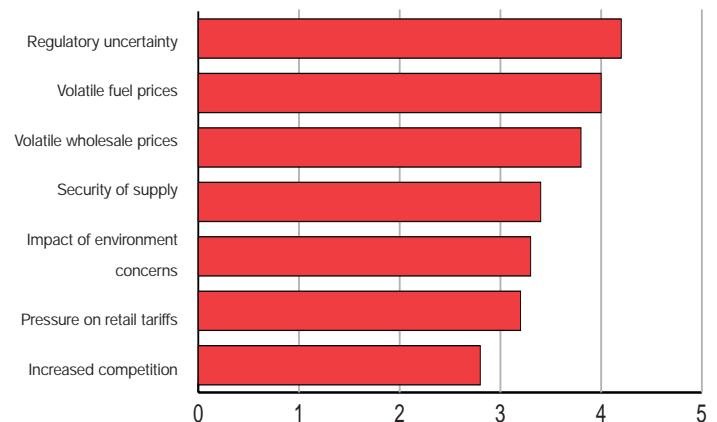
If investment by New Zealand utilities has been seen to be both short of requirements and difficult to implement, don't expect to be guided by overseas experience. PwC's latest utilities global survey has highlighted that New Zealand is no different to the rest of the world in its underinvestment in utilities. More specifically, New Zealand is not the only country with concerns over security of supply, transmission capacity and the development of renewable energy. The survey has voiced a global "infrastructure wake up call" with the consensus of opinion from respondents that historical underinvestment will make blackouts far more likely to occur in the future.

Lack of investment has been identified as the primary cause of growing security of supply and transmission capacity issues, both globally and locally. Survey respondents throughout the world have blamed this lack of investment on the sector's inability to attract investors, which in turn is being blamed on uncertainty caused by regulation. In New Zealand, investment decisions have not been driven by lack of capital but rather by market uncertainties, particularly tighter gas supplies, resource consenting processes and regulatory uncertainty.



"The [global] investment challenge on electricity and gas utilities is immense. Meeting projected demand will entail cumulative gas and electricity investment of some US\$12.7 trillion¹ in the period to 2030."

Figure 1: View from investors: What do you consider to be the main concerns for investors in the utility sector at present?



Note: Average responses. Rate where: 5=most significant; 1=least significant
Source: PricewaterhouseCoopers, Under Pressure 2005

¹ US\$10 trillion for power generation and US\$2.7 trillion for gas-supply infrastructure

M&A activity on the rise

Deal making in the utilities sector is running at record levels with US\$123 billion of activity recorded world-wide in 2004. The New Zealand market has also followed these trends with the sale of controlling stakes in major utilities such as Contact Energy, Powerco and NGC. Utilities are continuing to move out of their home territories in the pursuit of scale but with a noticeable trend towards focusing on regional expansion rather than pursuing a globally stretched footprint.

Currently the most desirable place to invest in utilities is Europe. However, a shift in investment to the East is starting to occur as Eastern Europe and the Asia-Pacific region are becoming increasingly attractive.

Environmental reporting

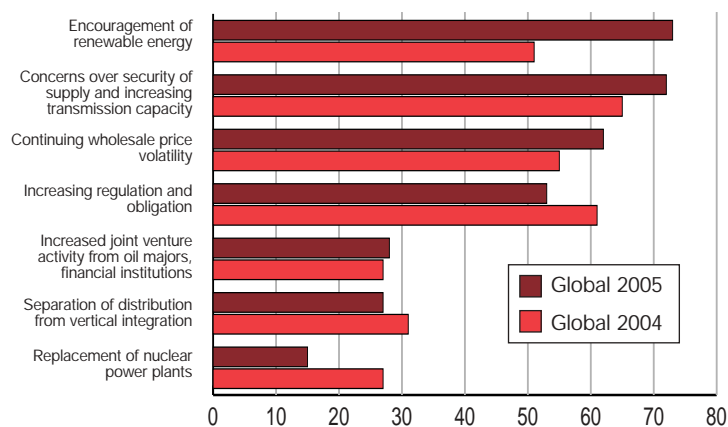
Utilities are being driven by regulatory influences such as Sarbanes-Oxley and International Financial Reporting Standards to bring greater transparency to reporting. Many respondents view environmental reporting as a clear opportunity with strong business benefits. Nearly two-thirds signalled that they are intending to step up environmental reporting.

Electricity generation fuel mix

Investment in renewable generation has been on the rise for some time in a world-wide response to environmental concerns. This is also the case in New Zealand irrespective of the country's historically high level of renewable (hydro) generation. Despite these current global patterns, respondents expect that the share of renewables, within national generation portfolios, will remain static over the next decade as investment growth in this type of generation is expected to fall short of the growth in total supply. To counter this, countries will need to liberalise regulations and provide better incentives for investment in renewables. In this climate, over half of the respondents expect that the renewables boom will give way to a world-wide nuclear revival.

For a copy of the full report, please visit www.pwc.com/energy

Figure 2: View from utilities: Looking ahead over the next five years, what do you see as major likely aspects of the power market?



Note: Global responses only. % share of responses

Source: PricewaterhouseCoopers, Under Pressure 2005

The investment scorecard:

Utility investors' top five criteria

We asked investors what would most affect the attractiveness of utilities to investors in the coming years. This is what they said:

- 1 Greater regulatory certainty
- 2 Regulatory incentives for investment
- 3 Corporate transparency
- 4 Improved price environment
- 5 Focused core business strategies

Source: PricewaterhouseCoopers, Under Pressure 2005

Electricity Lines Businesses Publish Self Assessments of Threshold Compliance

Late last month, 28 Electricity Lines Businesses (ELBs) published their self assessments against the Commerce Commission's regulatory thresholds for the period ended 31 March 2005². This is the third assessment to take place under the Commission's targeted control regime but the first time that the modified thresholds (applicable from 1 April 2004) have been applied.

The purpose of the Commission's Targeted Control Regime is to promote the efficient operation of electricity distribution and transmission markets. Each year, ELBs must compare their price and reliability performance against thresholds that are set by the Commission. This self assessment provides a screening mechanism for the Commission to identify ELBs whose performance requires further investigation and potentially, control.

The first price path threshold required no nominal increase in average prices from 8 August 2001 to 31 March 2004, allowing for the pass through of changes in transmission charges and local body rates on system fixed assets. From 1 April 2004, a modified price path threshold applied. This price path utilises a CPI-X mechanism, which provides incentives for ELBs to reduce prices in real terms through improved efficiencies.

Table 1: X-Factors for each Electricity Lines Business

X=-1%	X=0%	X=1%	X=2%
Northpower OtagoNet JV Waipa Networks	Electricity Invercargill Network Waitaki Scanpower The Power Company Top Energy Unison Vector	Alpine Energy Aurora Energy Buller Electricity Electricity Ashburton Horizon Energy Nelson Electricity Network Tasman Orion Westpower	Centralines Counties Power Eastland Network Electra Mainpower Marlborough Lines Powerco The Lines Company WEL Networks

Note: Transpower has been assigned an X-Factor of 1%.

Under this mechanism, ELBs must ensure that their annual price increases are less than CPI increases minus an X factor. X factors are different for each ELB and comprise a B factor, reflecting industry-wide efficiency improvements and a C factor, reflecting the relative performance of groups of ELBs based on comparative productivity and profitability. The X-Factor for each ELB is shown in Table 1.

The quality threshold has two components. The first component requires no deterioration in supply reliability by comparing the current year to the average annual reliability for the 1999 to 2003 period. The second component requires ELBs to engage, consider, and act upon the price and quality requirements of consumers.

Threshold Assessments at 31 March 2005

The number of threshold breaches has significantly fallen since the last assessment. Whereas a year ago, 20 of the 28 ELBs reported breaches against the price path and/or

quality threshold, this number has now fallen to 7 in the most recent assessment.

Self assessments published by the ELBs indicate that two breaches of the price path were carry overs from previous breaches; one other related to price increases in excess of allowable prices; and another breached because of a technicality arising from a price decrease mid way through the period.

The breaches of the quality threshold reflect in most cases, the impact of extreme weather events on supply reliability. In one other case an ELB breached quality due to an increase in planned maintenance, reflecting substantial network development programmes undertaken over the past year. Assessments against the consumer engagement component of the quality threshold, which must be completed every two years, will be made at 31 March 2006.

A timetable for completion of the Commission's review of the self assessments at 31 March 2005 has not been reported. The next self assessments will be published in May 2006 for the year ending 31 March 2006.

Table 2: Summary of Threshold Assessment at 31 March 2005

Threshold Assessment	Breaches	Explanation for Breach
Price Path – 5(1)(a) ³	3	<ul style="list-style-type: none"> • 1 – Increase prices • 2 – Carry-over of last year's breach
Price Path – 5(1)(b) ⁴	1	<ul style="list-style-type: none"> • 1 – Decreased prices mid-year
Quality – Interruption Duration	5	<ul style="list-style-type: none"> • 1 – Increase in planned maintenance due to regional growth • 4 – Extreme weather events
Quality – Interruption Frequency	4	<ul style="list-style-type: none"> • 1 – Increase in planned maintenance due to regional growth • 3 – Extreme weather events

Note: Four distribution companies did not disclose self assessments against 5(1)(b)

² Transpower is to publish its self assessment in August 2004.

³ A breach of 5(1)(a) occurs when an ELB's average prices have increased by more than CPI-X.

⁴ A breach of 5(1)(b) occurs when an ELB's average prices are higher at any time during the year than the average prices at the beginning and end of the year.

Energy Team



Craig Rice, Partner, Corporate Finance

Craig is National Energy Leader for PricewaterhouseCoopers, and advises a number of energy businesses on valuation, strategy and mergers and acquisitions. In addition, Craig leads the firm's Asia-Pacific Corporate Finance energy practice.

Phone: 09 355 8641 **Mobile:** 021 624 462 **Email:** craig.rice@nz.pwc.com



Lynne Taylor, Director, Corporate Finance

Lynne leads PricewaterhouseCoopers regulatory practice, which encompasses regulatory strategy development, valuation and compliance advice.

Phone: 09 355 8573 **Mobile:** 021 779 088 **Email:** lynne.taylor@nz.pwc.com



Chris Taylor, Director, Corporate Finance

Chris provides a range of corporate finance services to leading companies in the energy sector, such as advising on mergers and acquisitions, strategy, valuation, and investment analysis.

Phone: 09 355 8600 **Mobile:** 021 617 045 **Email:** chris.e.taylor@nz.pwc.com



Graeme Pinfold, Partner, Assurance

Graeme is the leader of our Energy Group for Assurance. He has significant experience in the energy sector.

Phone: 09 355 8044 **Mobile:** 021 358 001 **Email:** graeme.pinfold@nz.pwc.com



Andy Wotton, Partner, Assurance

Andy provides Assurance services, including outsourced internal audit and risk management, to a number of leading energy sector providers.

Phone: 04 462 7200 **Mobile:** 025 930 804 **Email:** andy.wotton@nz.pwc.com



Maurice Noone, Partner, Assurance

Maurice is the Managing Partner of the South Island practice of PricewaterhouseCoopers. He acts for a number of clients in various capacities in the energy sector across the South Island.

Phone: 03 374 3102 **Mobile:** 021 343 543 **Email:** maurice.noone@nz.pwc.com



Teresa Farac, Partner, Tax

Teresa has over 20 years experience in tax and specialises in the energy industry. She has extensive first hand experience of the technical tax issues that are particular to the energy sector as well as wider industry issues.

Phone: 09 355 8443 **Mobile:** 025 600 2253 **Email:** teresa.farac@nz.pwc.com

Disclaimer: Leading Energy is intended as a guide only. Readers are advised that before acting on any matter referred to in this publication, they should consult a PricewaterhouseCoopers Advisor.

© 2005 PricewaterhouseCoopers. All rights reserved. PricewaterhouseCoopers refers to the network of member firms of PricewaterhouseCoopers International Limited, each of which is a separate and independent legal entity.