

# Information to support Price Control Thresholds

A presentation to Commerce Commission  
Conference 7 April 2005

By

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THE FUTURE

**POWERCO**

# Presentation Outline

- **Introduction**

**Steven Boulton, Chief Executive Powerco**

The practical considerations of defining information disclosure needs in a changing regulatory environment

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- **International practice**

**Jeff Balchin, Director Allen Consulting Group**

International regulatory best practice – Case study, taxation treatment

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- **GAAP**

Powerco endorses the prior submission given by **Joanna Perry, Partner KPMG** on behalf of Vector

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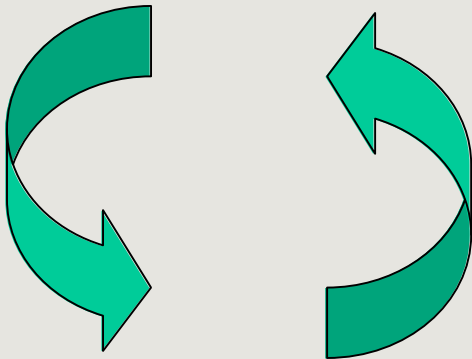
- **Legal issues**

**Tom Weston, QC & Victoria Heine, Partner Chen Palmer**

Commerce Act requirements in regard to information disclosure and legal tests

# Is Information Disclosure supplying useful information?

- **Information**



- **Benchmarks**

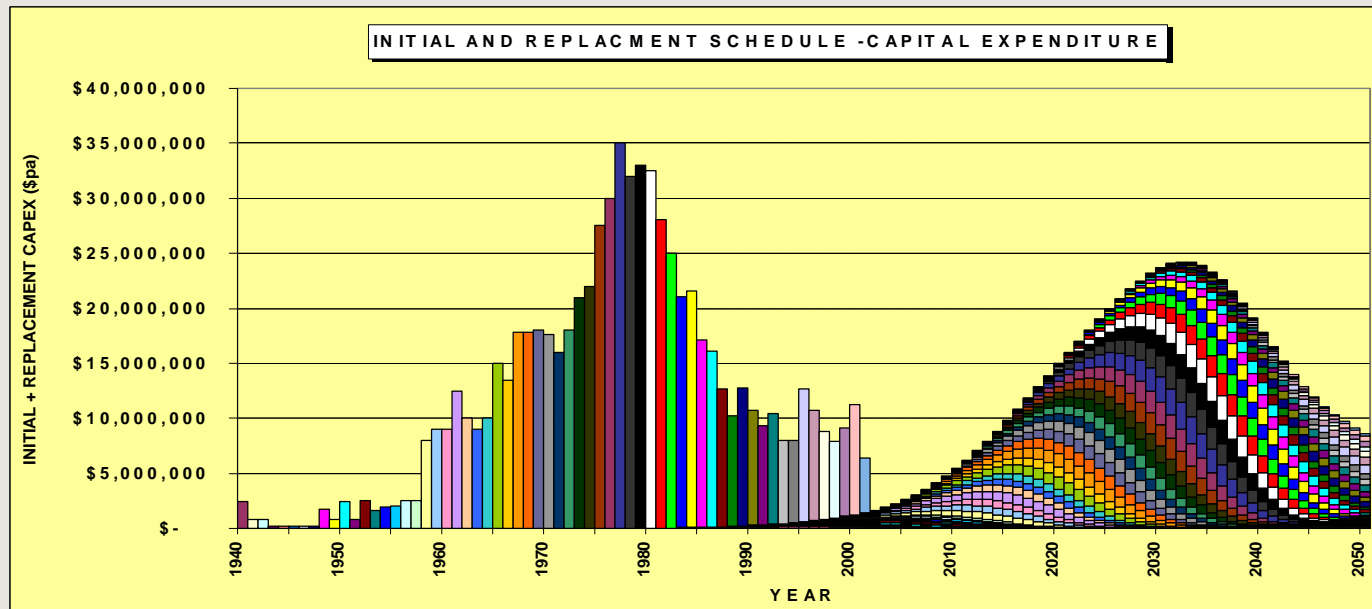
- The prime purpose is to inform, monitor and compare (s.57V)
- Ancillary purpose is thresholds and post breach inquiries; but....
- Regulatory principles need to be sound
- Is useful and necessary data/information being collected?
- Reference points have moved
- NZ position contradicts trend in international decisions

# The Wall of Wire

Aging asset base and overutilised assets are underlying causes of declining reliability overseas and a key driver for capex, opex and hence price

First wave of investment 30-50 years ago – assets now require replacing

But price path thresholds lock in low levels of expenditures – just as increasing peak demand and load growth impose more strain on existing assets



# Adequacy of regulated revenues

## UK – 2004 Decision:

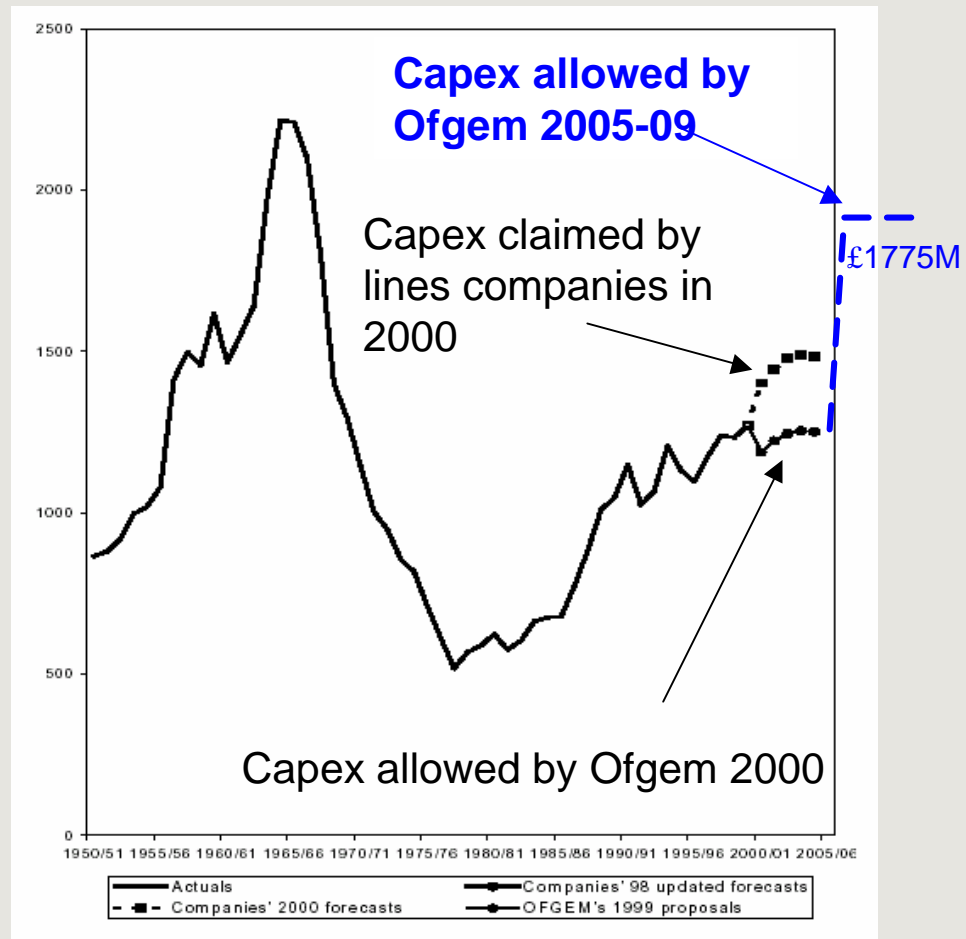
Downward trend of expenditures and prices reversed

WACC up 0.4% - not much, but who ever heard of WACC rising?

X factor = 0% compared with -3% in 2000 decision

Po Average for 14 lines companies up 1.3% - past adjustments were large downward adjustments to revenues

Capex allowances – up 48%



# Adequacy of regulated revenues

## NSW

*“The trend of increasing consumption and reducing prices is no longer sustainable. Over the past 7 years average prices have reduced in real terms of 24%, while average demand has risen by 30%. In some cases growth-related expenditure has been at the expense of replacement” .....IPART, 2004*

NSW IPART 2004 Pricing decision for period 2005-2009 (A\$)		
	Opex 2005	Capex 2005
Energy Australia <i>Annual distribution price increases</i>	\$288M 29% increase Yr 1 CPI+7% Yrs 2-5 CPI+1.6%	\$403M 126% increase
Integral Energy <i>Annual distribution price increases</i>	\$208M 24% increase Yr 1 CPI +5% Yrs 2-5 CPI+1.5%	\$285M 300% increase
Country Energy <i>Annual distribution price increases</i>	\$222M 30% increase Yr 1 CPI+7% Yrs 2-5 CPI+2.5%	\$240M 106% increase

# Asset cost drivers the Information Disclosure model doesn't disclose

- **Asset age**
- **Asset condition**
- **Asset utilisation**
- **Growth in demand and consumption**

Asset performance and thus CAPEX and OPEX is affected by age but it does not feature in the assessment of “efficiency”.

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There is no account of asset condition in the efficiency calculation. Quality threshold uses lagging indicators.

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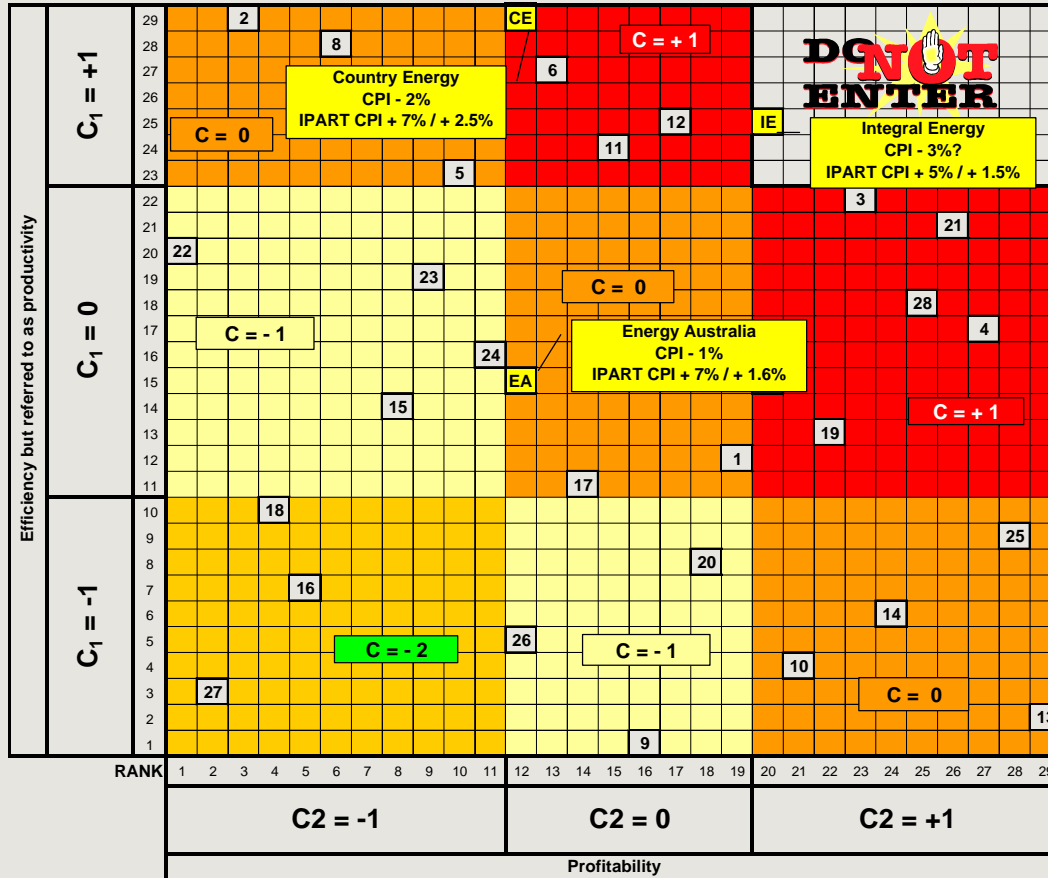
No acknowledgment of the prudent/optimum level of asset utilisation to avoid over stressing network assets.

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Sufficient revenue is required to fund development capex

# NZ's regulatory model gives very different results for Australian ELB's from their own regulators.

C1 / C2 Matrix - Australian DNO's added



Key	ELB
1	Alpine Energy
2	Buller Electricity
3	Centralines
4	Counties Power
5	Dunedin Elec Combined
6	Eastland Network Comb
7	Electra
8	Electricity Ashburton
9	Electricity Invercargill
10	Horizon Energy
11	MainPower
12	Marlborough Lines
13	Nelson Electricity
14	Network Tasman
15	Network Waitaki
16	Northpower
17	Orion New Zealand
18	Otago Power
19	Powerco Combined
20	Scanpower
21	The Lines Company Comb
22	The Power Company
23	Top Energy
24	Unison
25	UnitedNetworks Comb
26	Vector
27	Waipa Networks
28	WEL Networks
29	Westpower

**Data Sources:**

NZ data from Meyrick Final Report Regulation of ELB's 1996-2003

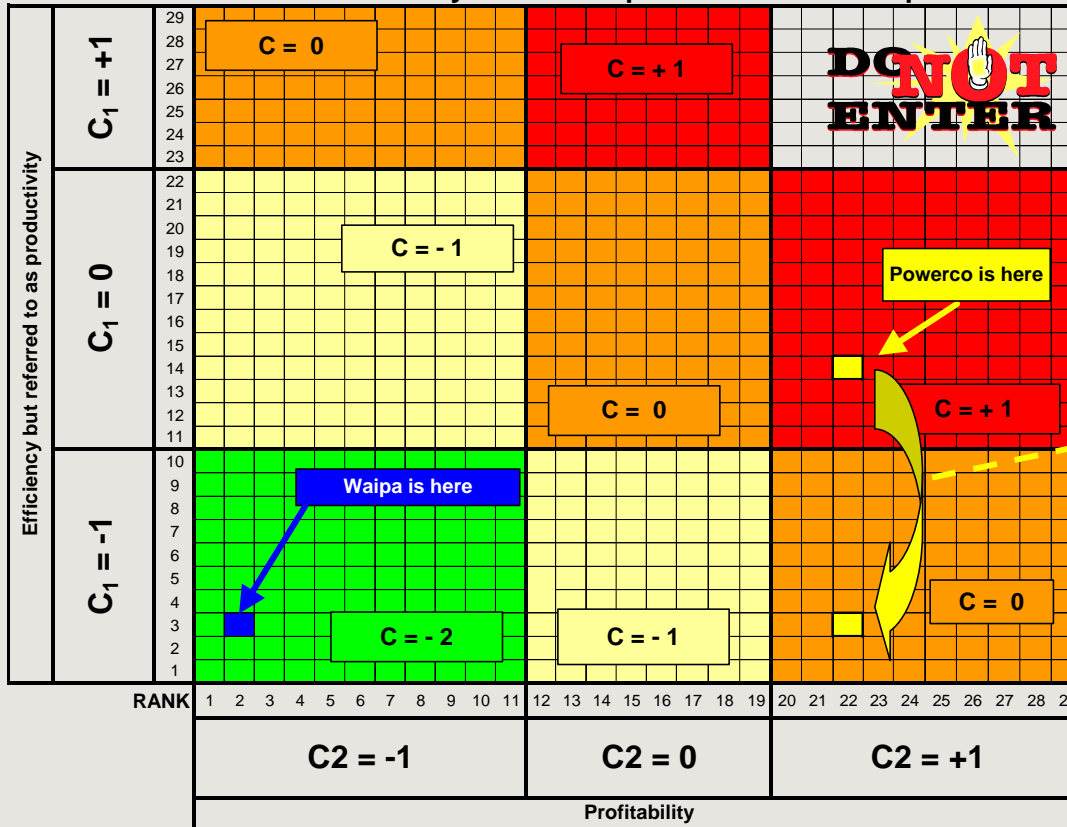
Australian data from IPART Public Disclosure of Regulatory Accounts 2003 and NSW Electricity Distribution Pricing 2004-2009 Final Report.

Note: A\$ converted to NZ\$ at prevailing exchange rate

Network Characteristics	Customer density ICP's/km	Load density MWh/ICP	Opex per Cust \$/ICP	Opex per km \$/km	Load factor %
Energy Australia	29.9	18.5	166	4964	60%
Integral Energy	23.1	19.9	232	5351	58%
Country Energy	3.9	13.9	378	1492	56%
NZ ELB Average	11.3	16.1	181	1819	64%

# Counterintuitive implications of the threshold model are in part due to the limited information set it uses

C1 / C2 Matrix - Meyrick Final report - Powerco v Waipa



To improve productivity to a position BETTER than Waipa's rank Powerco must:

- Increase energy volume by 150% = 3,116GWh (present largest consumer = 360GWh) = i.e. 9 x Powerco's largest consumer;
- OR
- Increase the number of consumers by 59% = 101,011
- Powerco's cust density increases from 10.1 to 16.0 (Waipa's cust density = 11.3);
- OR
- Reduce system line length by 88% i.e. remove 13,220km;
- OR
- Reduce transformer capacity by 72% i.e. reduce capacity by 1,012MVA; AND still supply the same number of consumers;
- OR
- Reduce opex by 54% = \$14.6Mp.a. RROR from 9.1% to 12.9%
- Powerco's cost per cust reduces from \$174 to \$80 (Waipa's cost per cust = 125\$)
- Powerco's cost per km reduces from \$1,715 to \$789 (Waipa's cost per km = \$1.442)

Note: Data sourced from Meyrick ELB Database

	Waipa Networks	Powerco Combined
Customer Density ICP's/km:	11.5	9.9
Load density MWH/ICP:	15.6	13.2
Cost per customer \$ p.a.:	125.4	220.7
Cost per system km \$ p.a.:	1,442	2,178

# CAPEX and OPEX comparison

Now obvious there are serious problems with regulation overseas

New Zealand model uses overseas decisions as reference points to form a judgement

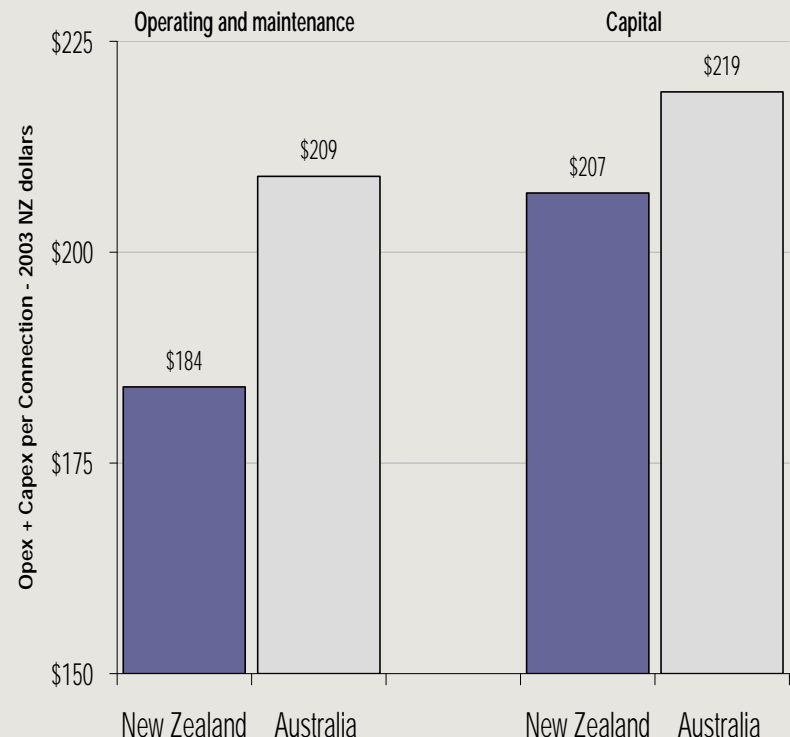
New Zealand CAPEX and OPEX compare favourably

OPEX and CAPEX/ICP for New Zealand and Australia suggests costs are too low – not too high.....this will drive price...and the gap is widening – Australia's 2005 cost will rise further:

Opex \$221/connection

Capex \$272/connection

New Zealand expenditures are insufficient to maintain supply reliability in longer term – the assets are being bled, cost reductions and hence price purported as “efficiency improvements”



# Moving New Zealand to the front

## Issues:

- ❑ Hard won reductions by lines sector are not flowing to consumers
- ❑ Lines costs cannot continue to fall, they are too low
- ❑ Costs associated with regulation are increasing materially
- ❑ Assets are aging, “wall of wire” is coming
- ❑ Asset overutilisation is increasing risk to consumers
- ❑ Consumers demand networks should keep pace with technology use

## New Zealand needs:

- ❑ Balance between prices, security of supply, and a standard for asset age and utilisation – consumers and market need to be educated – must understand the 3 P relationship (Price, Profit, Performance). Price and Profit must be decoupled.
- ❑ Incentives for investment in long-term electricity supply (or as minimum, removal of disincentives and continued uncertainty)
- ❑ Regulatory balance and independent rigour - merit reviews or similar plus “Productivity Commission” equivalent