

# Evolution of Electricity Lines Price Control

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INTERNATIONAL

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# Overview

- **Analysis of current regime**
- **Review of Cabinet recommendations**
- **Review of Commission thresholds proposals**

# Part 4A Regime

## Section 57E

***The purpose of this subpart is to promote the efficient operation of markets directly related to electricity distribution and transmission services through targeted control for the long-term benefit of consumers by ensuring that suppliers—***

***(a) are limited in their ability to extract excessive profits; and***

***(b) face strong incentives to improve efficiency and provide services at a quality that reflects consumer demands; and***

***(c) share the benefits of efficiency gains with consumers, including through lower prices.***

# Part 4A Regime

## Competitive Market Benchmark

- Regulation under the Commerce Act is intended to replicate (workably) competitive outcomes
- “Functional rents” exist in workably competitive markets
  - As opposed to “functionless” (*AMPS-A*)

# Part 4A Regime

## Thresholds

- **Price path threshold (CPI-X)**
  - Aggregate productivity
  - Relative productivity
  - Relative profitability
- **Quality threshold (no material deterioration)**
  - Breached if either SAIDI or SAIFI for the relevant year exceeds the 1999-2003 (5-year) average
- **Set for 5 years**
- **Explicit consideration and rejection of profit threshold**
  - “it could harm incentives to improve efficiency”

# Part 4A Regime

## Regulatory Contract

- **In essence, the Commission established the expectation that it had set a 5-year regulatory regime**
  - If a lines business complied with the thresholds, then it would be free to make efficiency gains and reap the profit benefits of those gains during the 5-year period

# Part 4A Regime

## “Vacuum”

- **Thresholds set in absence of any firm-specific analysis of future capital and operating expenditure requirements**
  - Lines businesses that are achieving the outcomes described in section 57E may nevertheless breach the thresholds
- **Subject to Commission’s post-breach behaviour, this is not necessarily a problem. Rather, given the very large numbers of lines businesses in the small New Zealand economy, this may be an appropriate cost, i.e., it may be most appropriate to use an imperfect thresholds regime rather than specifically regulate every firm.**

# Part 4A Regime

## Breaches

- **Breach is inevitable: there is no protection from Commission's choice of whether to investigate**
  - Forecast error
  - Quality volatility
- **Over 100 breaches outstanding (dating back to 2003)**
  - Reliability criteria breached 40 out of a possible 140 times
- **27 of 28 lines businesses have breached**



# Price

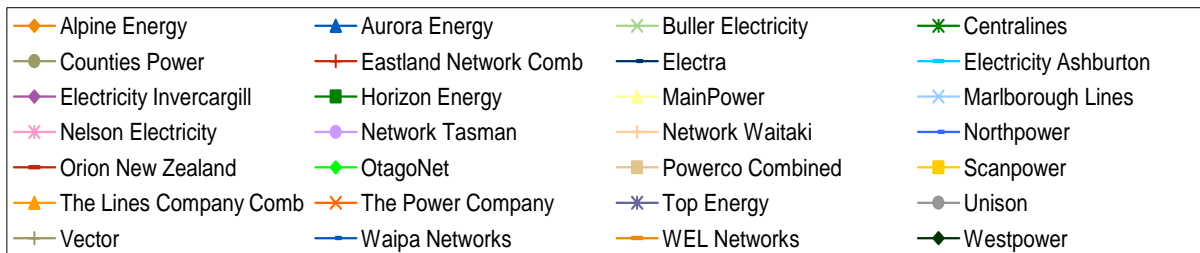
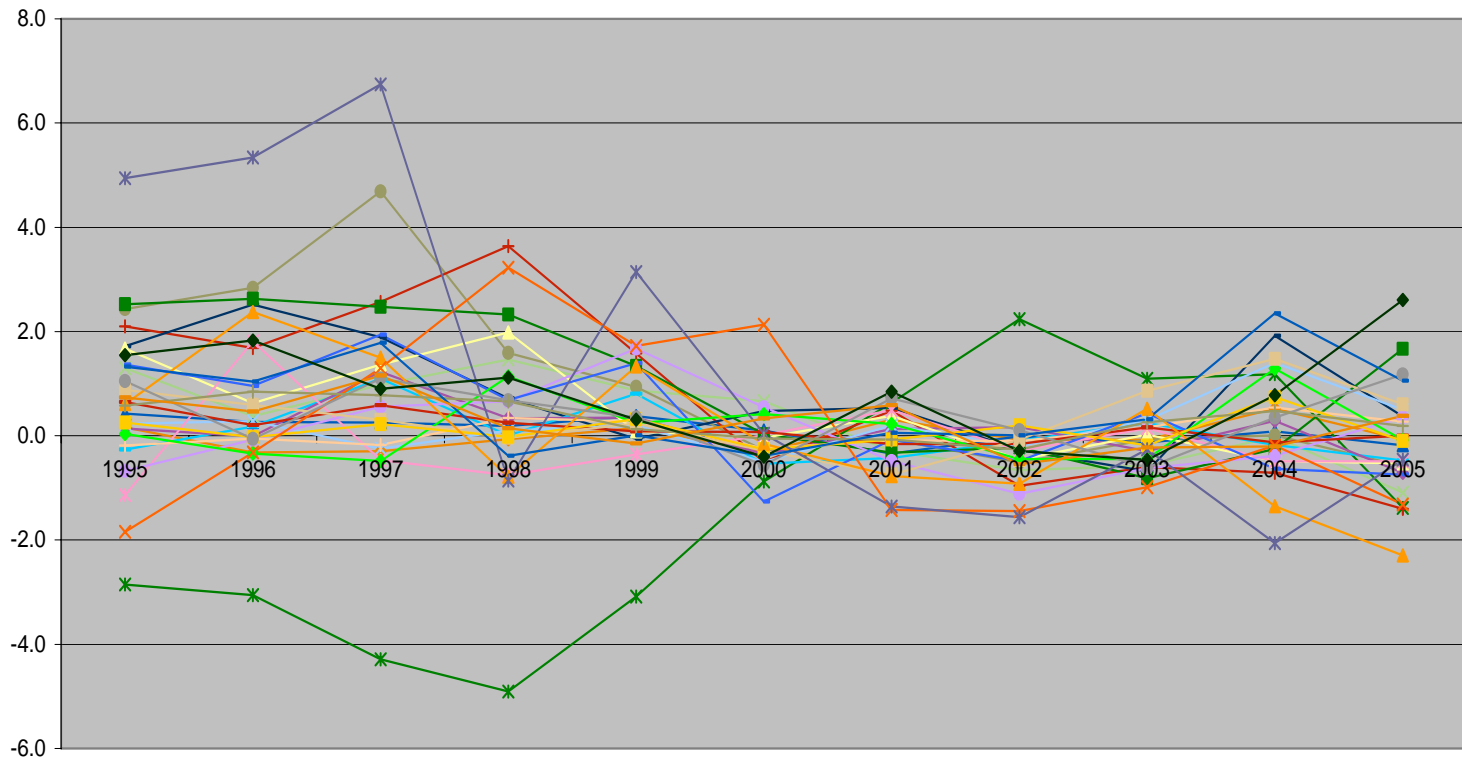
# Threshold

# Breaches

Electricity Lines Business	Price Threshold Breach Amount (\$)	Price Threshold Breach Amount (% of first assessment revenue)
Alpine Energy	\$848,848	4.89%
Aurora Energy	\$1,038,000	2.89%
Buller Electricity	\$3,140	0.12%
Centralines	Not breached	Not breached
Counties Power	Not breached	Not breached
Eastland Network	Not breached	Not breached
Electra	\$14,737	0.09%
Electricity Ashburton	Not breached	Not breached
Electricity Invercargill	\$118,176	1.24%
Horizon Energy	Not breached	Not breached
Mainpower	\$519,938	2.86%
Marlborough Lines	\$330,271	2.51%
Nelson Electricity	Not breached	Not breached
Network Tasman	Not breached	Not breached
Network Waitaki	Not breached	Not breached
Northpower	Not breached	Not breached
Orion	\$460,600	0.50%
OtagoNet	\$101,813	1.22%
Powerco	\$1,508,000	0.86%
Scanpower	Not breached	Not breached
The Lines Company	Not breached	Not breached
The Power Company	\$589,675	3.28%
Top Energy	\$64,265	0.46%
Transpower	\$67,903,190	14.94%
Unison	\$10,980,352	23.89%
Vector	\$76,927	0.03%
Waipa Networks	Not breached	Not breached
WEL Networks	\$1,167,237	1.78%
Westpower	Not breached	Not breached

# Quality Breaches

SAIFI - Variation Around 1999-2003 Mean



# Part 4A Regime

## Investigation of Vector

- **Nominal breaches by Vector triggered an investigation of Vector's performance by the Commission**
- **Proposal to control Vector largely based on a profitability analysis and differential returns**
- **Signal to all lines businesses that even nominal breaches of the thresholds will result in the Commission assessing the profitability of those firms, and potentially making a decision to control based on profitability**
  - Lines businesses having a reduced incentive to make efficiency gains
  - Generally increased uncertainty about the regulatory regime, although increased certainty that the Commission's concern is profits

# Part 4A Regime

## Proposed Settlements

- **Unison**

- To comply with price path
- To rebalance across regions and customer groups
- Commission notes that Unison may earn more than its WACC

- **Vector**

- To comply with price path
- To rebalance across regions and customer groups
- Commission notes that Vector may earn more than its WACC
  - “There are likely to be positive impacts on investment and efficiency incentives for Vector (and also the wider industry) from continuing to signal the Commission’s regulatory commitment to a medium-term price path, thereby contributing to regulatory certainty and stability” (para 193)

# Part 4A Regime

## Implications

- **The section 57E purpose statement suggests regulation under the Act should mimic a competitive market**
- **In its breach investigations, the Commission instead focused on profits**
- **However, the Commission has backed off somewhat**
- **There remains significant uncertainty about the consequences of a breach**

# Government Review of Commerce Act

- **Review of Parts 4 and 4A prompted by, among other things, concerns that:**
  - Part 4A thresholds regime is unsatisfactory, in terms of certainty for businesses and incentives to invest
  - Accountability regime for Commission is limited (only judicial review is available)
- **Cabinet paper published on 22 November 2007**
- **Focus here is on changes to Part 4A, rather than 4**

# Cabinet Paper

## “Default/customised price-quality path”

- **Cabinet paper recommends “default/customised price-quality path” regime to replace Part 4A (and to apply to gas pipelines)**
  - The Commission would set a default price-quality path for a regulatory period (normally 5 years) for all businesses in a regulated sector based on factors such as productivity trends and comparative benchmarking. In this respect it would be very similar to the current Part 4A thresholds regime
    - However, question about implications of a breach
  - A firm would have a choice of either accepting this default path or making a (public) proposal to the Commission for a customised path

# Cabinet Paper

## “Default/customised price-quality path” (con’t)

- **Helps to mitigate the vacuum approach**
  - Don’t have to breach in order to deal with Commission on investment
- **Downside is potentially increased complexity and regulatory costs in a small economy**
- **But**
  - The Commission would only be obliged to make determinations on four proposals per sector a year, and to prioritise its work as it saw fit. Other proposals would be deferred until the following year
  - The default path would apply from the start of the regulatory period. Provision would be available for reasonable revenue-recovery where the Commission subsequently set a higher price path



# Cabinet Paper

## “Default/customised price-quality path” (con’t)

- **And what if the penalties for breach are larger?**
  - Price-quality path would have to be more conservative

# Cabinet Paper

## Input methodologies

- **“Input methodologies” (how to determine the cost of capital, value assets, allocate common costs, etc) should be set in an up-front stand-alone process by the Commission**
- **The purpose is to give greater certainty, transparency and predictability to businesses (including businesses not subject to regulation) and their customers. Virtually all submitters, including the Commission, endorsed the proposal**

# Cabinet Paper

## Input methodologies (con't)

- **It is important to note, though, that the most appropriate input methodology, or at least the details of it, will often depend on the specifics of the industry being regulated**
  - E.g., asset valuation methodology might depend on industry
    - Are capital costs falling or rising?
    - Commerce Commission itself has applied different asset valuation methodologies to different industries. In particular, it has applied:
      - Opportunity cost for airport land
      - Historic cost for specialised airport assets
      - ODV for gas networks
- **Also, is implementation part of the methodology?**
  - E.g., draw from distribution of WACC

# Cabinet Paper

## Cooperatives

- **Trust-owned “small” electricity lines businesses (17 out of 28 ELBs) will be subject only to information disclosure, while the ‘default/customised price-quality path’ approach would be applied to other ELBs and to gas pipelines**
- **Rationales:**
  - Consumers are owners
  - Small size may mean that costs of heavier regulation outweigh benefits
- **Safety valve**
  - Commission can recommend that full regime applies where substantial proportion of consumers have petitioned and Commission thinks change in regulation would better meet purpose statement

# Threshold Reset

## Price Threshold

- **Similar “B” and “C” factors as previously (i.e.,  $X=B+C1+C2$ )**
- **New “I” factor floated**
  - To be applied to firms with significant renewal investment requirements
- **Rationale makes sense, but**
  - Is a movement towards cost of service regulation
  - Would a better approach be to enhance the post-breach mechanisms?
  - Does not fit very comfortably with customised path

# Threshold Reset

## Price Threshold (con't)

- **New  $P_0$  adjustment also floated**
  - Another step towards cost of service regulation
  - Profitability is already captured in  $C_2$  factor

# Threshold Reset

## Quality Threshold

- **Normalise for extreme events**
- **Assess compliance by way of a three-year moving average**
- **Peer groups based on characteristics (e.g., percentage underground) affecting reliability**
  - Understandable
  - But not all cost drivers can be controlled for

# Threshold Reset

## Quality Threshold (con't)

- **Firms within each peer group would be ranked on dimensions of quality**
  - Below-average performers
    - Quality improvement glide path
    - Positive S-factor (with investment accountability)
  - Average performers
    - More moderate quality improvement glide path
    - No S-factor
  - Above-average performers
    - Slight quality improvement glide path
    - Positive S-factor as reward



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