



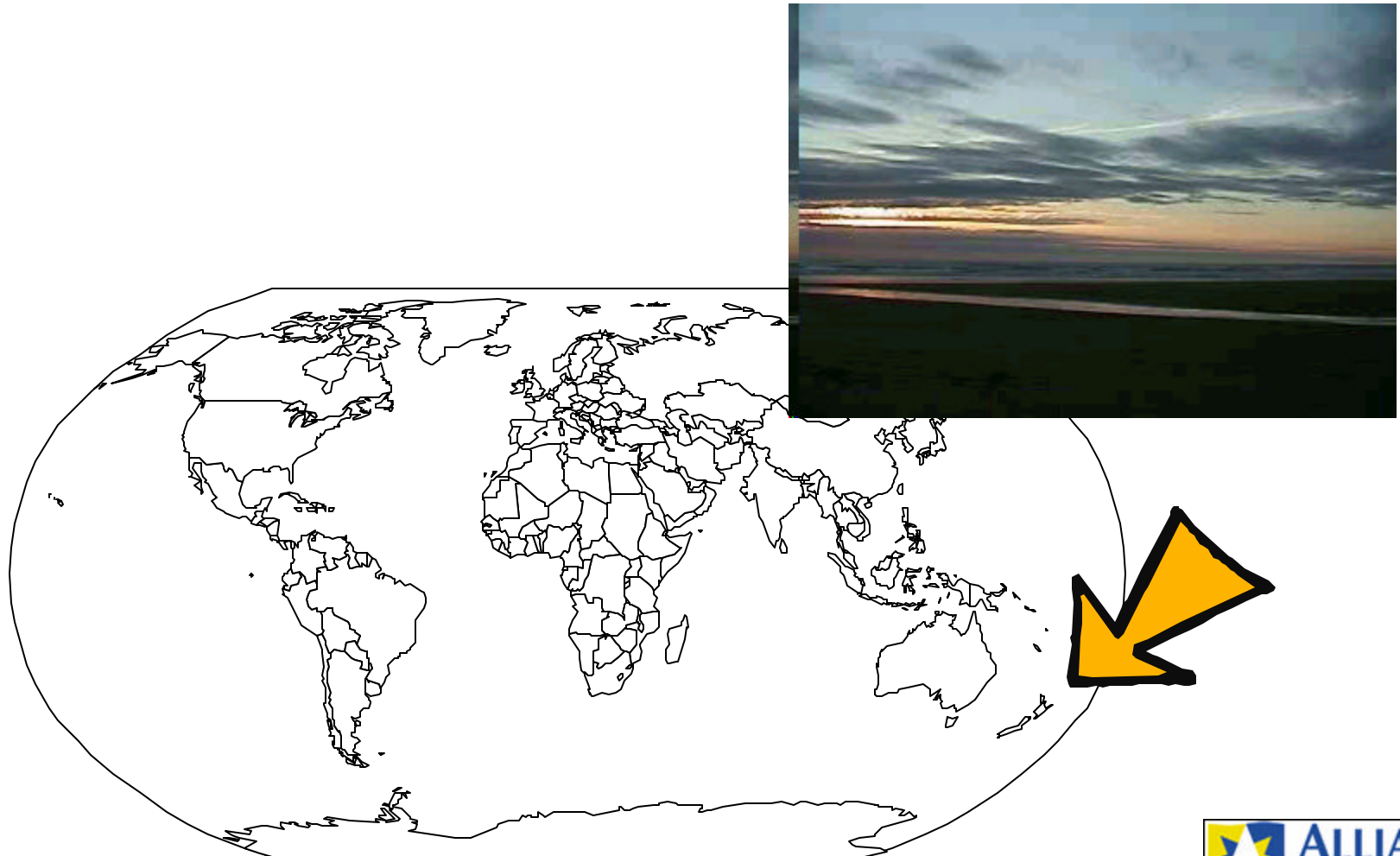
# **Retail Choice in New Zealand**

**Carnegie Mellon University  
June 10, 2004**

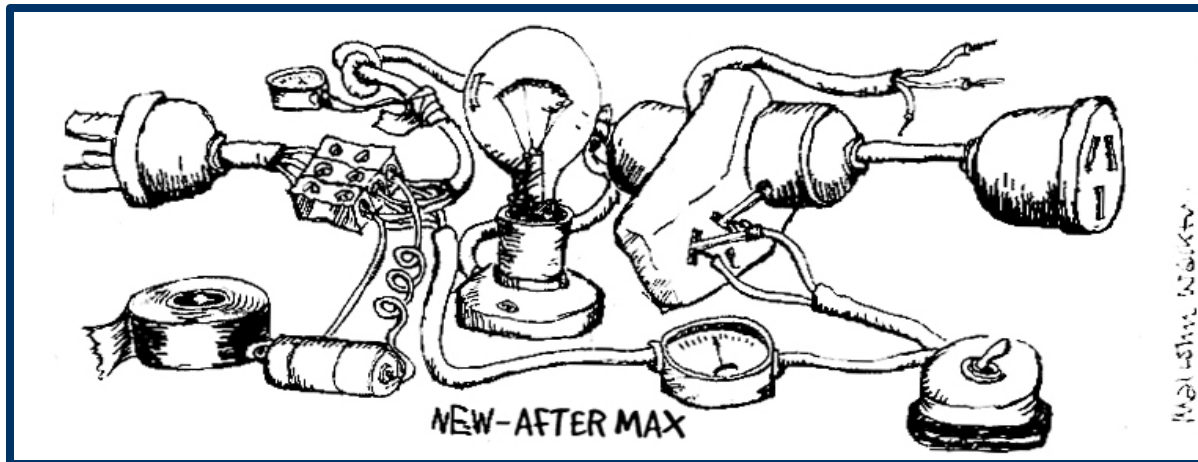
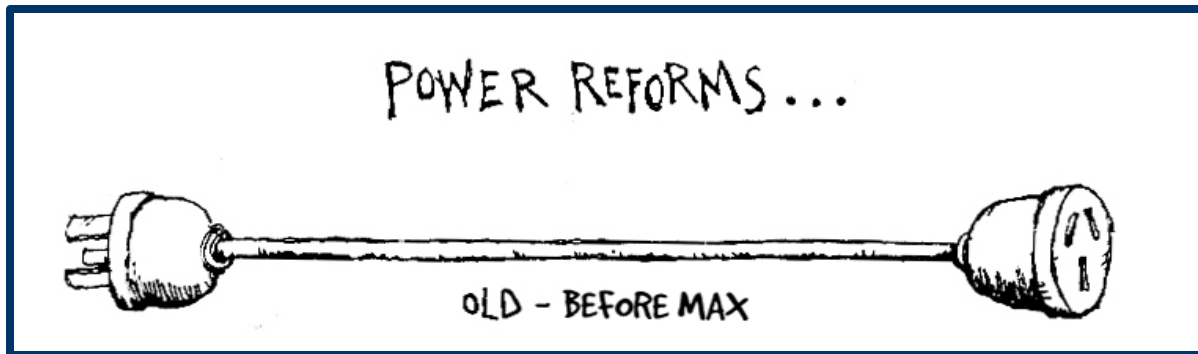
***Chris Lindell***  
***Vice President, Shared Services***  
***Alliant Energy***



# A short tour of New Zealand



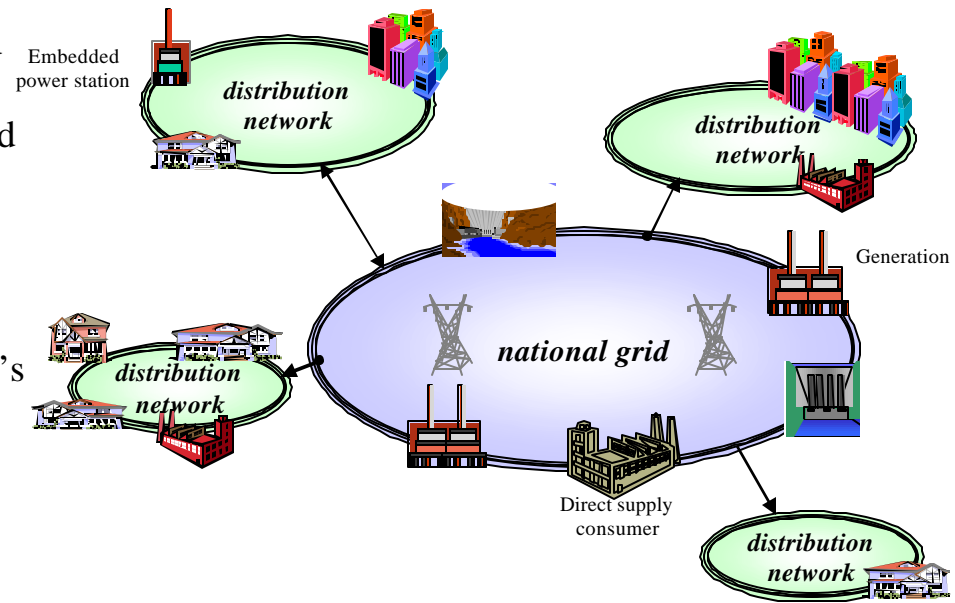
# What some thought of reform



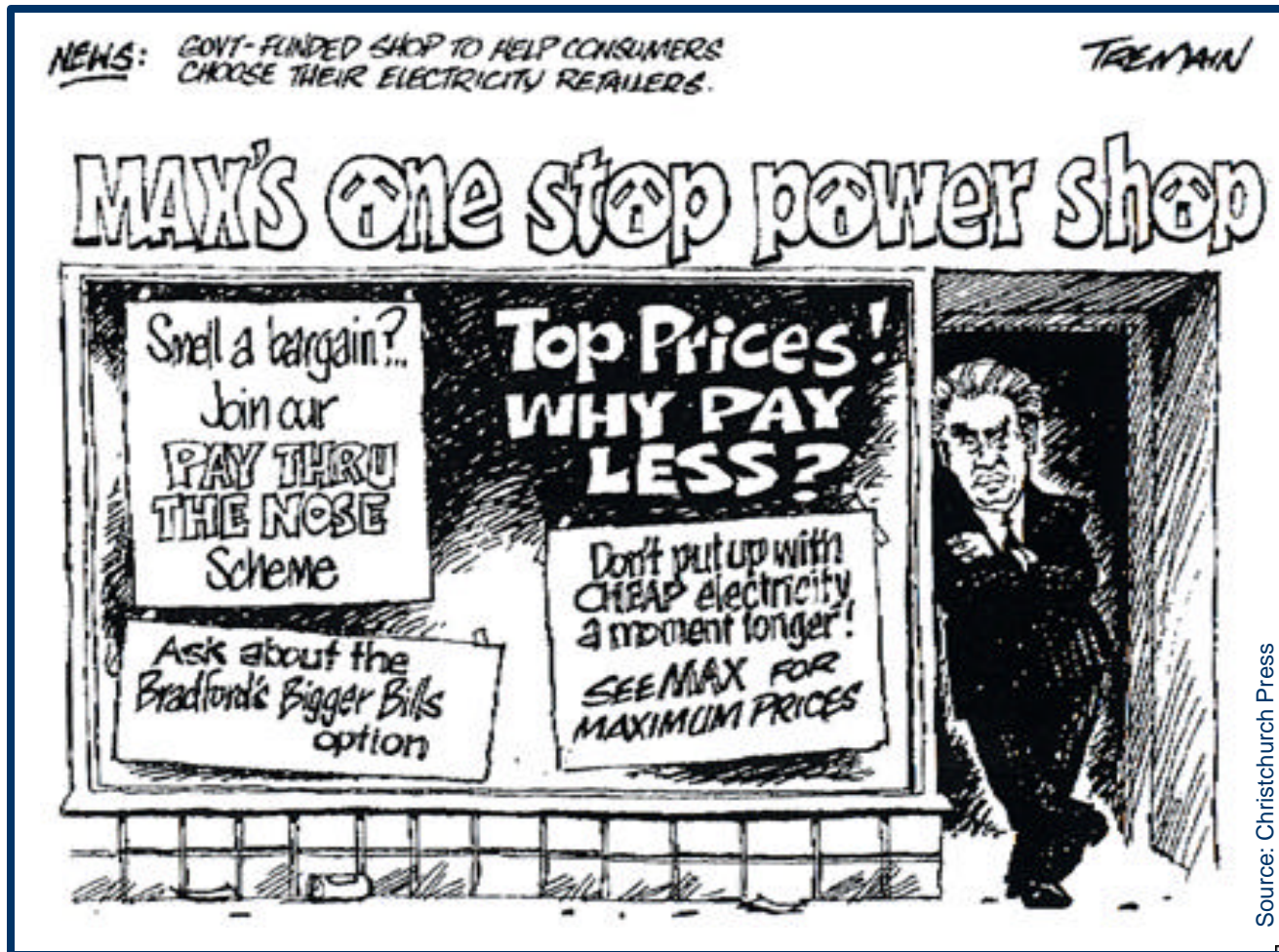


# New Zealand Market History

- **1987** – separation of policy from commercial, when the Electricity Corporation of New Zealand (ECNZ) was created;
- **1992** – power crisis when lake levels got to record lows. Although no formal rationing occurred, the inability of the market structure to adequately signal the crisis added impetus to sector reform.
- **1994** – Transpower (transmission system owner) was separated from ECNZ to ensure IPPs would have access to the national grid. To help sell IPP's output M-co (then "EMCO") was formed to provide a market.
- **1994** – Large consumers were given the right to obtain supply from different retailers.
- **1996** – Contact Energy was split from ECNZ. A competitive wholesale market started.
- **1998/99** – ECNZ was split three ways to form Mighty River Power, Genesis Power and Meridian Energy. Contact Energy was privatised. Local power companies were forced to split into separate retailers and lines companies. Every customer in the country was given freedom to choose their retailer.
- **2001** – A poorly functioning contracts market and a disjointed retail market compound a record dry year and leads to increased rationalization and vertical integration amongst generators and retailers – creating five 'gentailers'.
- **2003** – The government creates an Electricity Commission to administer the market and promote competition. Lines companies become subject to new pricing rules.



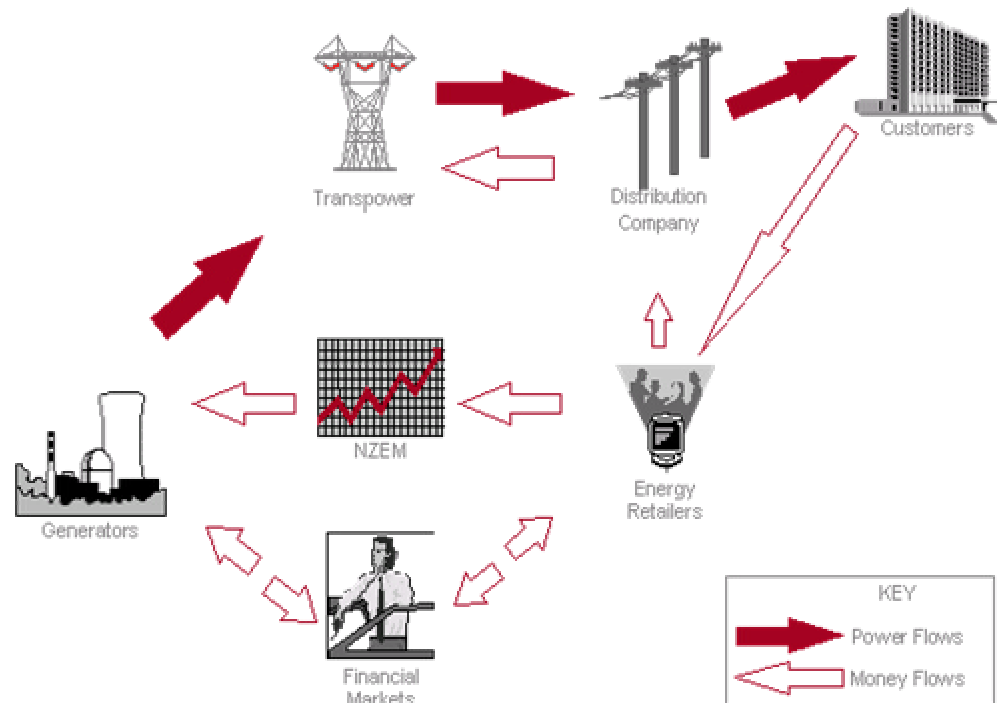
# What others think of reform....



# Energy Pricing 1996 - Current

*New Zealand electricity market was administered by the industry under voluntary agreements but is now administered by the Electricity Commission*

- The market operates very similarly under government administration as industry voluntary administration
- The market sets all energy prices;
- The Minister has the power to regulate all prices, to date has not used it;
- Retailers buy lines services from network owners and pass the charges through to consumers;
- Electricity in New Zealand is priced at market clearing levels and the price is not capped.



The diagram above shows the power and money flows within the market

# Competing for customers

- Advertising
- Loyalty programs
- Sweepstakes
- Price
- Shareholders
- “Adding value”
- New products





# Trying to win customers



# Shopping on the internet

The image displays four overlapping web browser windows, each showing a different energy-related website:

- PowerNew Zealand:** Features a green and white design with the text "PowerNew Zealand" and a large graphic of a stylized power plug.
- Mercury Energy:** Has a blue header with the Mercury Energy logo and navigation links like "Home", "About Mercury Energy", and "Energy for the home".
- Consumer PowerSwitch:** A white website with a blue header, titled "Consumer PowerSwitch" and "A Consumers' Institute service". It contains a form with questions such as "Which is your current electricity company and pricing plan?" and "How many people live in your household?".
- TrustPower:** Features a purple header with the TrustPower logo and navigation links like "Home", "About TrustPower", and "Contact Us". It includes sections for "Customer Info", "Account Access", and "Our Friends".



# Friends loyalty program



## Friends magazine

The advertisement features a large headline: "Want to chop your power bill?". Below the headline, it says: "Use your FriendsCard to any merchant on this list and you will receive generous discounts which will reduce your power bill". A photo shows a hand holding a Friends card. Below the headline, there are several merchant offers:

- Specials in Stores:** 1. McDonald's (McDonald's), 2. Home Depot (Home Depot), 3. Home Depot (Home Depot), 4. Home Depot (Home Depot), 5. Home Depot (Home Depot), 6. Home Depot (Home Depot), 7. Home Depot (Home Depot), 8. Home Depot (Home Depot), 9. Home Depot (Home Depot), 10. Home Depot (Home Depot).
- Automotive:** 1. Motor Company, 2. Automotive Ltd, 3. Automotive Ltd, 4. Automotive Ltd, 5. Automotive Ltd, 6. Automotive Ltd, 7. Automotive Ltd, 8. Automotive Ltd, 9. Automotive Ltd, 10. Automotive Ltd.
- Restaurants:** 1. Downtown Cafe & Confectionery, 2. Downtown Cafe & Confectionery, 3. Downtown Cafe & Confectionery, 4. Downtown Cafe & Confectionery, 5. Downtown Cafe & Confectionery, 6. Downtown Cafe & Confectionery, 7. Downtown Cafe & Confectionery, 8. Downtown Cafe & Confectionery, 9. Downtown Cafe & Confectionery, 10. Downtown Cafe & Confectionery.
- Home Services:** 1. Handyman Services, 2. Handyman Services, 3. Handyman Services, 4. Handyman Services, 5. Handyman Services, 6. Handyman Services, 7. Handyman Services, 8. Handyman Services, 9. Handyman Services, 10. Handyman Services.
- Landscaping:** 1. Lawn Care Services, 2. Lawn Care Services, 3. Lawn Care Services, 4. Lawn Care Services, 5. Lawn Care Services, 6. Lawn Care Services, 7. Lawn Care Services, 8. Lawn Care Services, 9. Lawn Care Services, 10. Lawn Care Services.
- Home Goods:** 1. Home Goods Stores, 2. Home Goods Stores, 3. Home Goods Stores, 4. Home Goods Stores, 5. Home Goods Stores, 6. Home Goods Stores, 7. Home Goods Stores, 8. Home Goods Stores, 9. Home Goods Stores, 10. Home Goods Stores.

Friends YOUR POWER BILL DISCOUNT CARD TrustPower



# New products and alliances

## The world's first HomePower

\$1 weekend electricity special\*



for HomePower customers only

## Mercury to offer phone deals

AUCKLAND. — Mercury Energy has teamed with telecommunications company WorldxChange to offer cheap toll calls to its 250,000 power customers in Auckland.

The deal is the first of several marketing arrangements Mercury plans to negotiate with service providers.

Mercury customers who want the cheap phone deal will have to sign with WorldxChange. But Mercury said it would use the buying power of its large customer base to ensure more

favourable prices than if customers signed individually. Customers would be offered cheap deals like \$1.50 weekend calls to anywhere in the country for up to three hours and 22c-a-minute off-peak calls to Australia, Britain and the United States.

Mercury customers will also be able to join WorldxChange's loyalty programme, receiving vouchers for stores such as Foodtown and Deka when they spent more than \$35 a month on phone calls. Despite the deal, WorldxChange

said competition in the long-distance market was under threat after Telecom's recent price-slashing.

"Telecom's new rates make a mockery out of Telecom's wholesale charges," WorldxChange chief executive Steven Stanford said of a 9c-a-minute off-peak calling deal being offered by Telecom.

WorldxChange was locked into flat per minute charges set two years ago.

The price of residential tolls had since dropped from 95c a minute to 15c.

# Spot Market Operation 1996 - Current

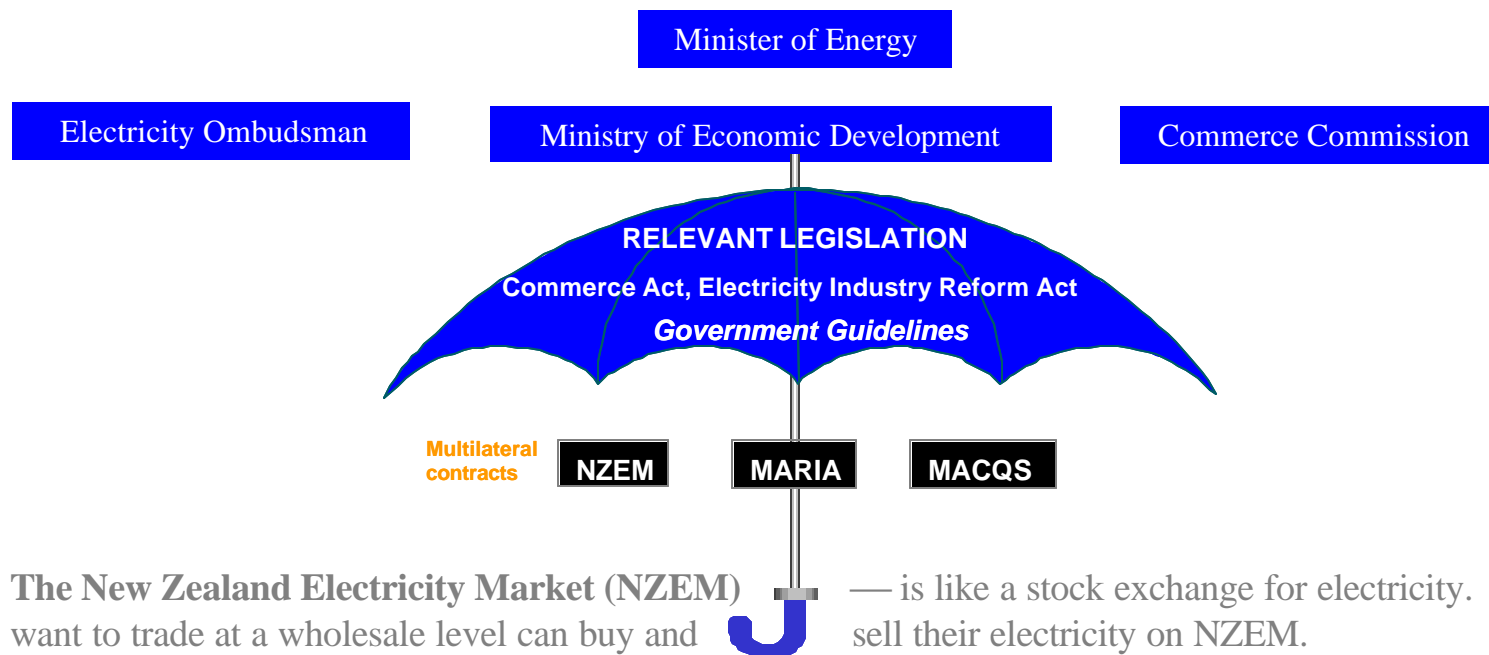
## *The New Zealand spot electricity market*

- Buying and selling wholesale electricity is done through a "pool";
- Generators offer electricity for dispatch through the transmission system (the national grid);
- Buyers buy electricity from this pool to supply their customers. This is the physical "spot" market;
- The spot market establishes a price for each of 48 half-hour trading periods every day, at 250 grid connection points around New Zealand;
- The price at each of these points incorporates the cost variation of electricity transmission owing to location, system security and constraints;
- The underlying price is set by the intersection of the actual demand curve (set by purchasers after the event – ex post) and the supply curve (established by generator offers – ex ante);



# Governing Bodies 1998-2004

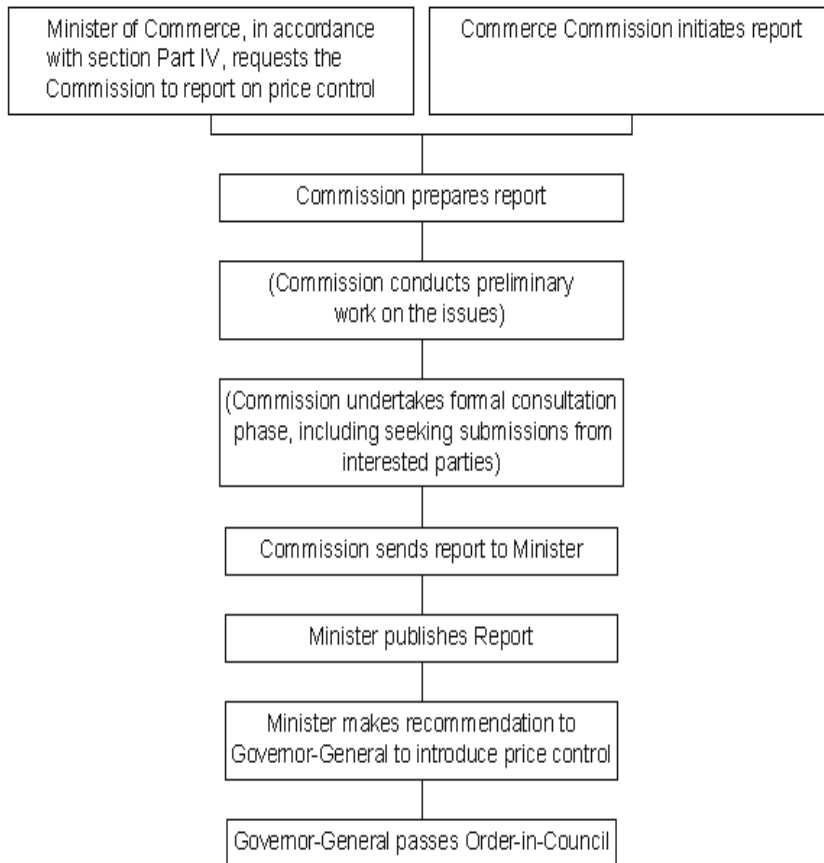
New Zealand Electricity Industry <http://www.nzelectricity.co.nz/celectric.htm>



- **The New Zealand Electricity Market (NZEM)** — is like a stock exchange for electricity. People who want to trade at a wholesale level can buy and sell their electricity on NZEM.
- **The Metering and Reconciliation Information Agreement (MARIA)** — MARIA also allows wholesale electricity trading using a different methodology from NZEM. More importantly, MARIA defines the centralised services that are required for retail competition. It sets metering standards and provides for the exchange of the metering data necessary to allow identification of who bought what from whom.
- **The Multilateral Agreement on Common Quality Standards (MACQS)** — MACQS sets quality standards for how the grid is to be operated. All electrical appliances and machines rely on the quality of electricity that comes out of the socket. Technically, managing this quality is a very complicated process involving the co-ordination of the grid and most of the electricity assets attached to it.

# Distribution Pricing 2003

*Lines (network distribution) are regulated*



- Lines rates are set by individual utility companies;
- Profits are monitored by the Commerce Commission to ensure no monopoly abuse;
- The Commerce Commission has used accounting rate of profit against WACC as an indicator of competitiveness. Asset values are based on optimal deprival value (ODV) – essentially replacement, not historical cost;
- Allowable rates are now set on a CPI-X approach



# Electricity Commission 2003

*The market is now administered by a government agency rather than the industry participants*

- Government assumes responsibility for meeting supply in one in 60 dry years;
  - Undertake modeling, forecasting, and provision of information on security of supply
  - Require disclosure of information on current and future thermal fuel availability
- Require investment in improved transmission services, and
- Improve demand side participation in the market
- Hedge market development
  - A *'tool kit'* of new powers will include:
    - contracting for dry year reserves (capacity and fuel) and setting terms and conditions for its use
    - setting minimum requirements on generators with regard to dry year reserves and offering long term contracts, and
    - setting minimum requirements on retailers and buyers to hold long term contracts and/or maintain demand-side management programs.





# Security of Supply 2004

*A reserve market that is separated from the energy market*

- The government, through the Electricity Commission, assumes responsibility for meeting supply in one in 60 dry years;
  - Reserve generation market announced. EC will seek tenders to supply fixed reserve capacity and fuel under [yet-to-be-defined] dry-year criteria; <http://www.med.govt.nz/ers/electric/establishment/index.html>
  - Recovered through levy on consumers;

*The Government's preferred mechanism is for the Electricity Commission to contract on an on-going basis for dry year reserves to be ring-fenced from the spot and contracts markets and made available on the direction of the Commission.*

*The objective is to ensure that this capacity is held in reserve to meet dry year and other fuel supply risks, while ensuring that incentives remain for buyers to take out hedges and contracts against spot prices and for generators to build new baseload generating plants.*

# Conclusions

- Deregulation in general “works” in New Zealand.
- The early games of competition have cooled off.
- The generation mix influences the need for reserve capacity.
- Light handed regulation and price signals can work.