

Development of the New Zealand Electricity Hedge Market

Presentation to WAG

By

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Hedge Market Development: Driving Forces



- 1) There is never too much liquidity
- 2) International experience is relevant
- 3) Vertically integrated markets cannot rely on market forces to create liquidity
- 4) Small retailers cannot survive for long in current conditions
- 5) Improve consumer access to forward prices
- 6) In part, an alternative to Labour/Green proposal
- 7) Lower costs for market participants
- 8) Perfect alternative to separation of retail and generation

Hedge Market Development: Key Objectives



- 1) Hedge Market should provide significant value in itself
- 2) Reduce OTC premiums to reflect standards set in liquid markets
- 3) Increasing depth in volume of standard products
- 4) Futures included in Clearing Manager prudential obligations
- 5) Facilitate contracts further out in time
- 6) Facilitate market-friendly products such as Residential Profile Contracts
- 7) Provide low cost risk management for generators & retailers to balance books

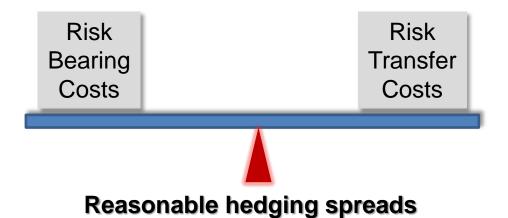
Hedge Market Development: Key Observations



- 1) Hedge Market in vertically integrated environments can be meaningless
- Premiums observed in non-OTC market are far above the cost of capital of initial margins
- 3) Premiums in ASX are far above forecast spot market prices
- 4) Small volumes can move price materially
- 5) Futures are disallowed from Clearing Manager
- 6) Beyond current year volumes are insignificant
- 7) Without more liquidity, all players warehouse risk in generation portfolios

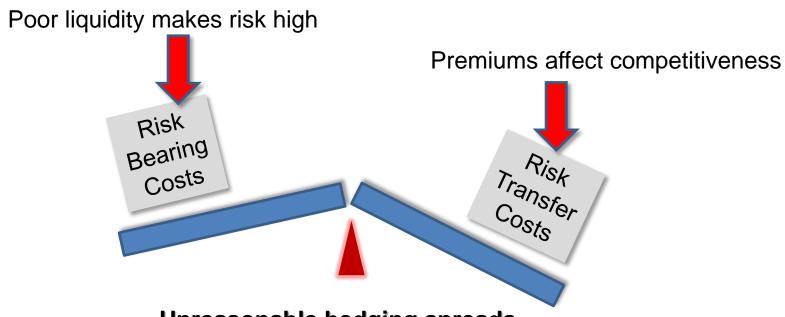
Hedge Market Development: A performing Hedge Market





Hedge Market Development: New Zealand Market is not performing





Unreasonable hedging spreads

Small retailers: Probability of survival is unreasonable



- 1) Virtually all small players ultimately sell out to a Gentailer as risk is expensive
- 2) Some currently spends \$30 per customer per year on prudential costs
- 3) CFD premiums to ASX in the 10% range
- 4) ASX premium to spot price forecasts in 15 to 20% range
- 5) Margins for retailers range from -10% to +10%
- 6) Lack of liquidity drives higher initial margins by the ASX
- 7) Ability to exit a position is often prohibitively expensive hold is the only answer



Essential Elements of a Functioning market

A Proposal

Hedge Market Development: Rejected ideas



- 1) Mandatory "sell" requirements on Generators at mandated prices
- 2) Mandated auctions
- 3) Labour/Green single buyer model

Hedge Market Development: The Proposal



Part A

- 1) Mandate vertically integrated players participation
- 2) The mandate includes following a certain portfolio structure and rules
- 3) Market making mechanism increased volume to a material level ie, 10%
- 4) Regulated buy-sell spread to \$1/MWh
- 5) Increase terms to 5 years
- 6) Bid blocks reduces to 0.25 MW

Hedge Market Development: The Proposal



Part B

- 1) Limit affiliate purchases to no more than 80% of retail volume sold
- 2) Subject to audit (ensuring offsetting transactions are not implemented to bypass the intent of non-affiliation)
- 3) 20% non-affiliate purchases can be of any type as long as they reported
- 4) 2 hour bidding window each day

Hedge Market Development: Volume commitments



Part C – Retailer non-affiliate volumes based on prompt year forecast

- 1) Prompt year 20% from non-affiliate
- 2) Year 2, 15%; Year 3, 10%; Year 4, 5%; Year 5 unspecified

Hedge Market Development: Transition consideration



Part C – Transition

- 1) 2015 start with 10% level and ramp to 20 % prompt year by year 3
- 2) 2015 implement a 5% for year 2,3,4



Consequences

Hedge Market Development: What is in for Gentailers?



- 1) Board level governance improvements not just internal modelling
- Transfer prices are vetted by third party benchmarks not just internal modelling
- 3) Transparent price to evaluate new power plants
- 4) Reliable third party Fair Market Value (FMV) tests
- 5) Ability to manage risk to tighter tolerances no more warehousing of unmeasured risk
- 6) Active traders produce better managed supply portfolios

Hedge Market Development: Customers?



- 1) Increased options with less forward uncertainty
- 2) Greater trust with the industry as pricing more transparent into the future
- 3) Innovation opening for solar, EVs, longer term day/night offers, etc.

Hedge Market Development: Other benefits



- 1) Electricity market trading expertise expand the profession
- 2) Expertise will stimulate innovation
- 3) Innovation will improve market performance
- 4) Smart metering, EVs, solar are coming need fast acting liquid risk management
- 5) Lower cost to consumers will be the end game

Hedge Market Development: Conclusion



- 1) Mandating non-affiliate purchases is not onerous
- 2) A tangible alternative to retail-generation separation
- 3) Driving out risk management costs is core to the EA overall mandate
- 4) Never too much liquidity
- 5) Investment decisions and board governance will work more effectively
- 6) Innovation will be the off-spring as profession of energy trading flourishes