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Wholesale Gas Market Design

1 December 2005



Framework

- Gas Act
- Government Policy Statement
- Size and scope of NZ Gas Market

Conceptual Design

Issues and progress

Where to from here?

- Gas Industry Co processes
- Timeframe



Gas Act Requirements

- S. 43F(2)(a) allows for [rules/regs] to be made...
 - "providing for the establishment and operation of wholesale markets for gas"

S.43J(1)(b): Minister may only recommend [rules/regs] if the recommendation...

- "implements the effect of a recommendation of the [Gas Industry Co]; and
- Does not differ ... in any material way..."



GPS Objectives and Outcomes

Overall policy objective:

• "To ensure that gas is delivered to existing and new customers in a safe, efficient, fair, reliable, and environmentally sustainable manner."

Specific outcomes sought:

- "The facilitation and promotion of the ongoing supply of gas ... by providing ... competitive market arrangements"
- "Energy and other resources are used efficiently"



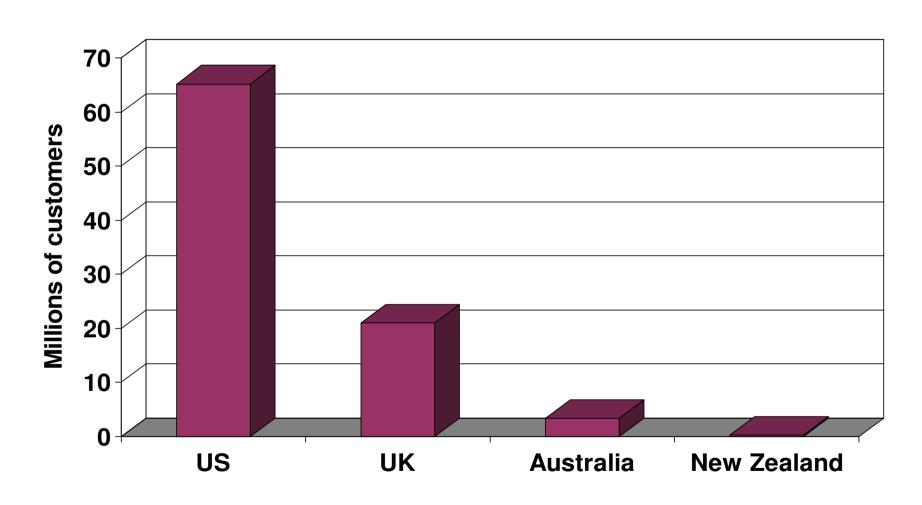
GPS Objectives and Outcomes (cont'd)

Specific outcomes sought:

- "Barriers to competition in the gas industry are minimised to the long-term benefit of end-users"
- "The development of protocols and standards applying to wholesale gas trading ..."
- "The development of a secondary market for the trading of excess and shortfall quantities of gas"



Context - Size of NZ Market





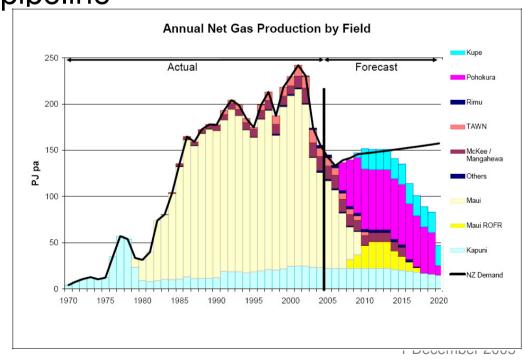
Context - Market Structure

Transition from Maui-dominated market to:

- Multiple producers
- Generally, smaller fields

Open-access to MDL pipeline

- Uncertainties:
 - Long-term supply/demand balance
 - LNG?





Conceptual Design – Initial Findings

Overall work stream objective:

"To develop workable, efficient arrangements for the trading of gas (including regulations and rules where appropriate) that satisfy both government and industry"



Market characteristics

- Concentrated supply
- Concentrated demand
- Substantial investment by supply- and demand-side
- Contract inflexibility
- Logistics of production and transmission
- Small economy caps market size
- Metering and information availability



Need for market, and constraints on mechanism



International markets – some lessons

- Bilateral market US: large market, many participants
- Pool market UK/Victoria: dense network, multiple supply sources, high information availability
- NZ: small market (illiquid), limited information available to third parties (barrier to entry), supply constraint (sellers' market)



International markets – lessons (2)

- In many overseas markets trading points spontaneously developed
- Information can be provided in various ways (eg formal markets, billboards)
- Some markets (US) have voluntary reporting of trades
- Risk allocation: given market is not large (c.f. US), standardisation of contracts could be considered (UK)
- All markets exhibited formal balancing mechanisms, daily correction most common with penalties outside a tolerance – limited linepack important consideration



Available features and contract terms

- Compulsory v voluntary liquidity v efficiency in trading mechanisms and practicality
- Anonymous v known counterparty managing risk v discrimination
- Prudential requirements net trading limits



Available features and contract terms (2)

- Hub v all welded/delivery points liquidity, transparency, participants' capacity to process information v transmission constraints, ability to participate
- Dispute resolution process
- Information availability participants and non-participants
- Standardised contracts spectrum of possibility

Practicality

- Direct bilateral party contacts other parties to negotiate individual contract
- Platform bilateral organised platform for searching for contract counterparty
- Net pool bids and offers delivered to third party, market is cleared where supply = demand
- Gross pool all gas are offered to pool long-term contracts are settled outside – inefficient in NZ
- Clearing house third party stands on one side of all contracts – insufficient liquidity in NZ



Evaluation criteria

- Efficiency
- Information availability
- Contract availability and competitive effects
- Regulatory certainty
- Administrative and compliance costs
- Practicality
- Equity
- Scalability



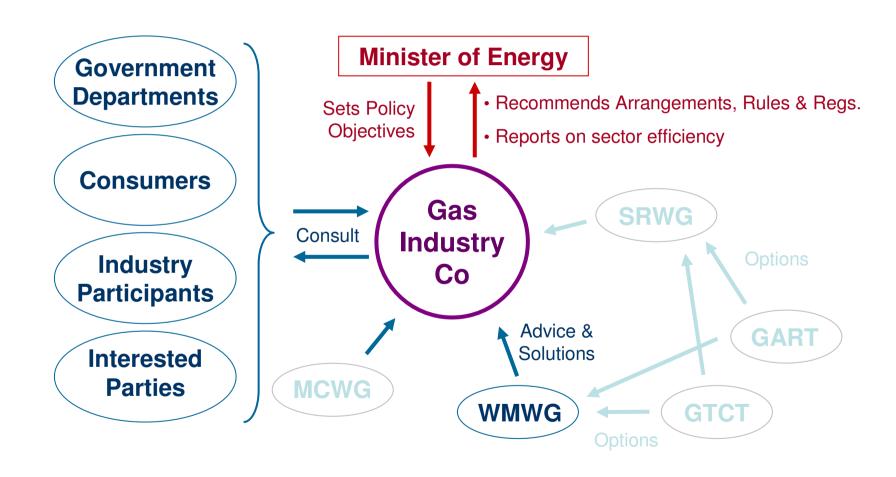
Gas Industry Co Process

Prior to recommending regulations, we are required to:

- Identify all reasonably practical options
- Assess those options:
 - Costs and benefits of each
 - Extent to which each achieves the objective(s); and
 - Any other relevant considerations
- Can objective(s) be achieved by means other than rules/regulations?
- Undertake consultation

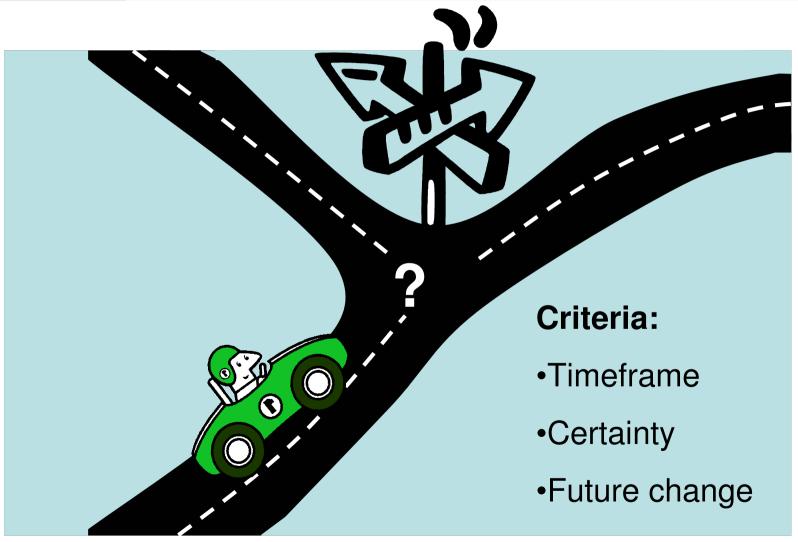


Dramatis personae





Industry Arrangement vs. Rules





Timeframe - Conceptual Design

Evaluation of short-term options

December 2005

Consideration and feedback from WMWG

December 2005

Evaluation of options for long-term market

January 2006

WMWG input

Finalise report

February 2006

Gas Industry Co Board

March 2006

Consultation document released

March 2006



Overall Timetable

Finalise Conceptual Design

Incorporate Feedback & Finalise Design

Monitoring & Review

Draft Market Rules

Define IT Platform

Consult on Detailed Design

Complete Rulebook

Tender for Service Provider

Testing & Implementation

12 to 18-month process