

Gas Inquiry Framework Conference



Commerce Commission
3 September 2003

Presentation Overview



- Introduction
 - Steve Bielby (NGC)
- NGC Presentation
 - Michael Cummings/Paul Hodgson (NGC)
- Legal Framework
 - Forrie Miller (Chapman Tripp)
- Economic Response to Framework
 - Lew Evans (Charles Rivers Associates)
- Inquiry Purpose and Valuation
 - Greg Houston (NERA)
- Cost of Capital Framework
 - Glenn Boyle (LECG)

Key Wider Themes



- Need to focus on particular features of NZ gas markets. Different to:
 - Overseas gas markets
 - NZ electricity markets
- Period of significant change:
 - Move to post-Maui world
 - Changes to markets/competition dynamics
 - Update previous views (eg interfuel competition)
 - Developing policy changes
- Need for investment:
 - Maintain existing systems
 - New pipes as well as new fields
- Pipeline issues well known and public over years:
 - Regular NGC exposure to Commission
 - Consistency important to NGC
 - Required by central and self regulation (eg annual pricing consultation)

Summary Points on Framework



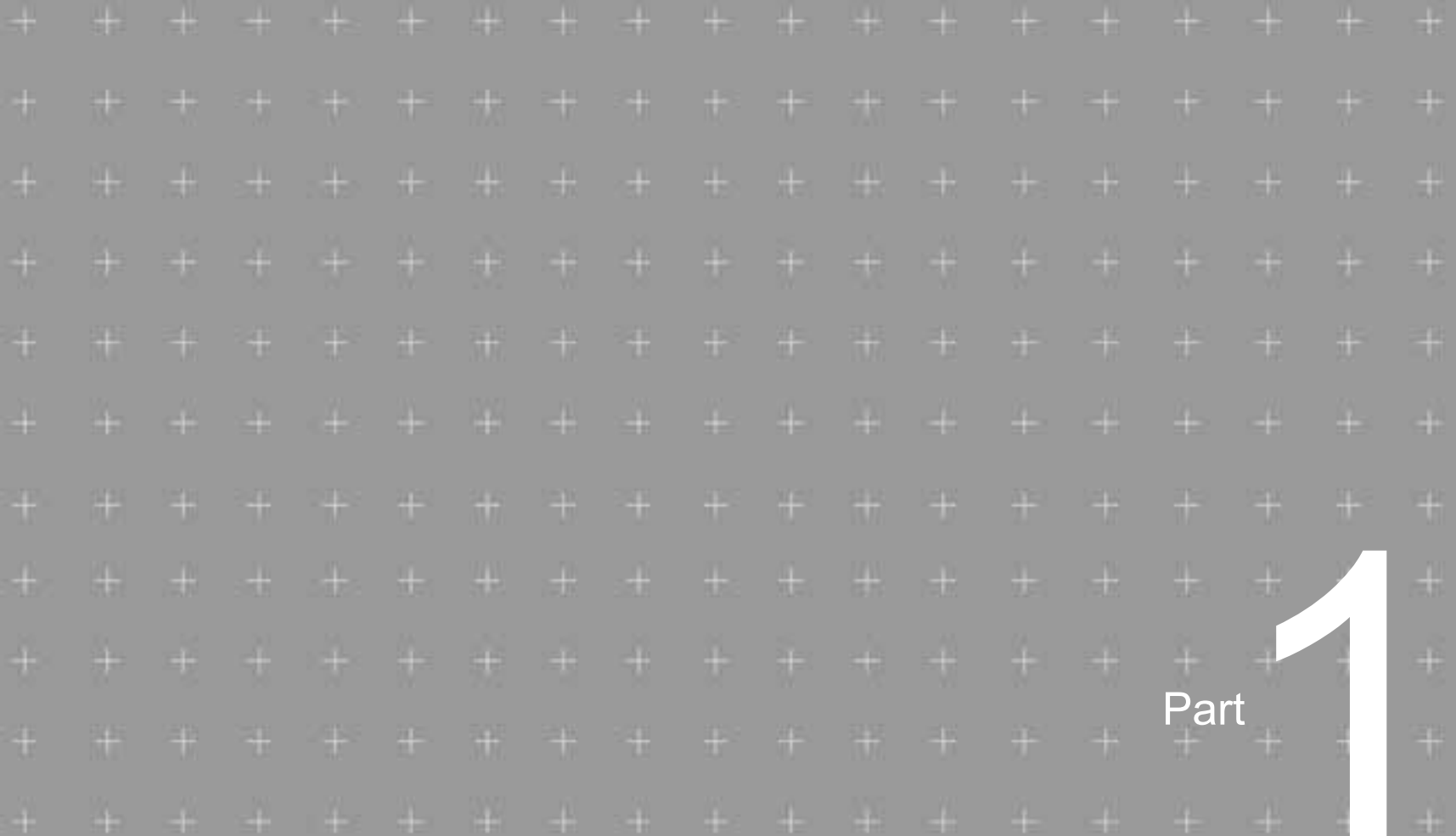
- Dynamic market post-Maui
- More risk than electricity as a high degree of inter-fuel competition
- Changing regulatory environment
- Appropriate asset valuation is ODV
- Significant risks not recognised in Commission's approach to WACC
- Costs of price control are likely to outweigh the benefits

NGC Presentation



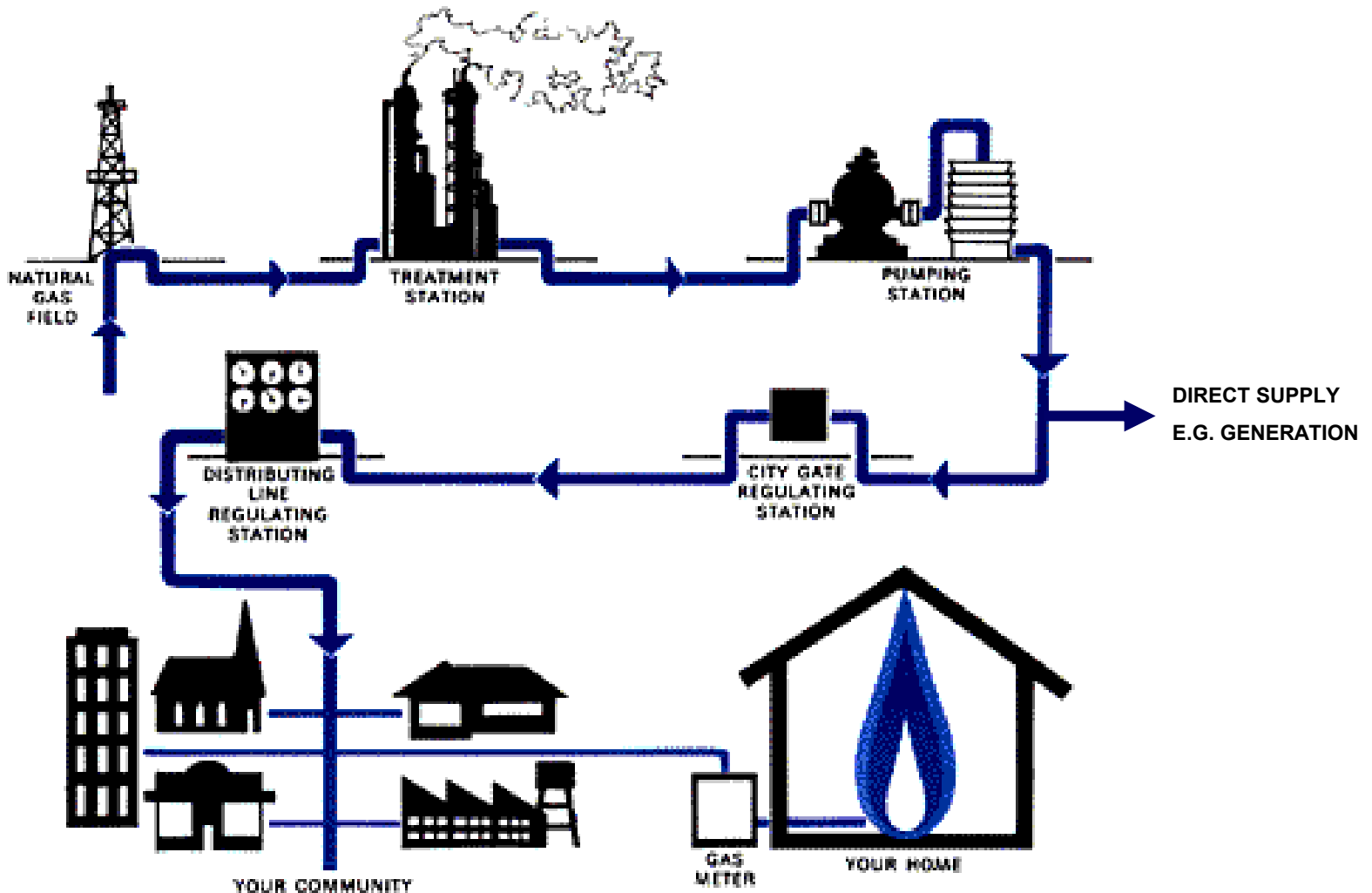
- Dynamic State of Gas Markets
- Investment Decisions
- Scope of the Inquiry
- Regulatory Regime
- Asset Base and Valuation

Dynamic State of Gas Markets

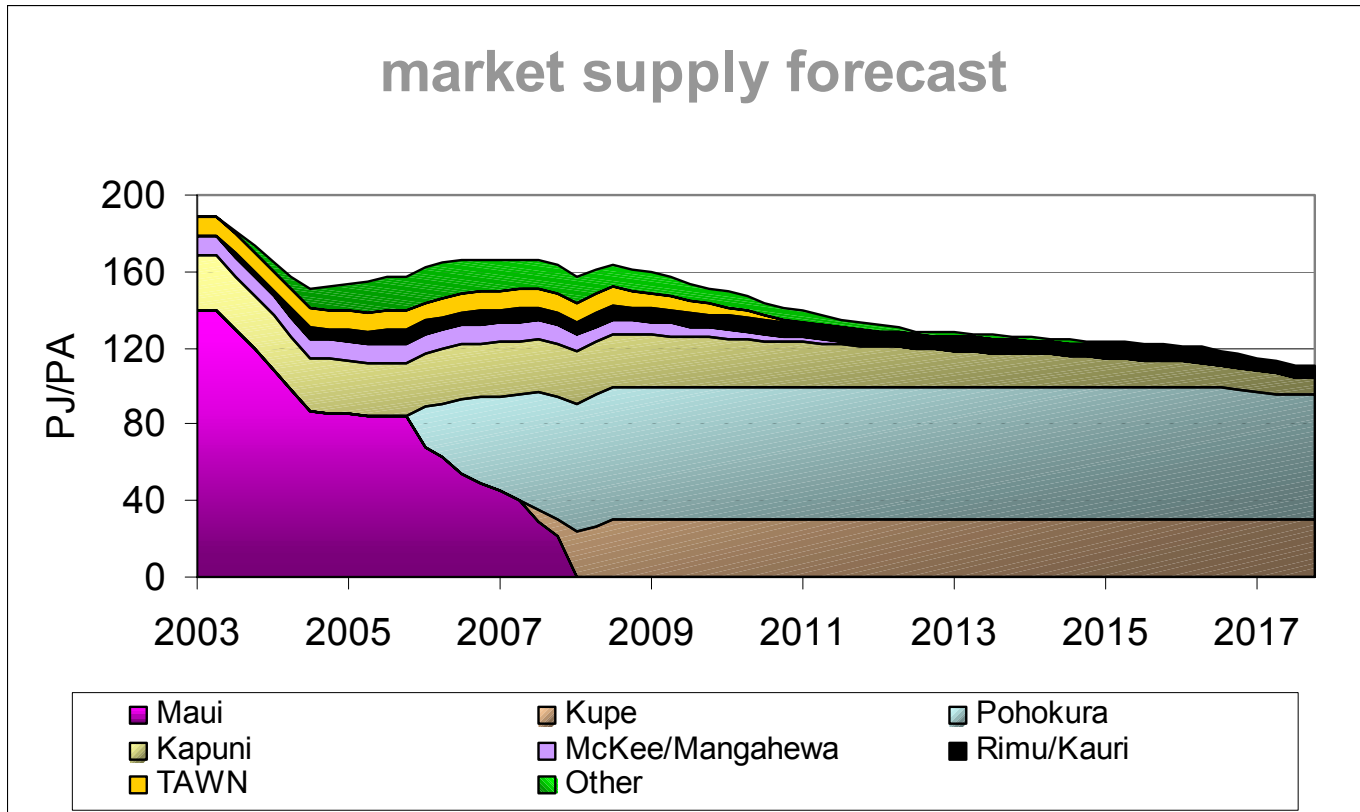


Part **1**

Generic Gas Supply Chain



Declining Gas Supply



Source: NGC Estimates, 2003

Impacts on Gas Market



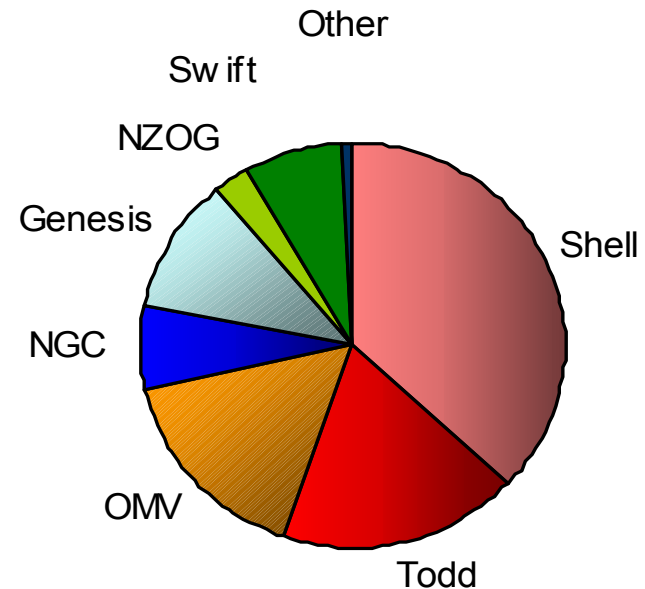
- The gas market is evolving to a post-Maui supply era
- Constrained deliverability, both annually & daily
- Swing capacity has greater value (held by producers)
- Physical shortages - unsatisfied demand for larger users
- Major Contracts coming up for renewal
 - Significant increases in energy component of price
 - No long-term commitments to supply

NGC Gas Position



- Increased competition for purchasing gas
- NGC will not replicate its historic position
- Fairly tight supply situation
- Strongest incentive to facilitate getting gas to market

reserves by owner



Generator Responses



- Maui gas has been the swing fuel
- Now coal (Huntly), oil (NP & Whiranaki)
- Certainty of fuel supply important
 - Genesis - 10 year coal supply contract
 - Contact - Otahuhu C & TCC 2 on hold
- Both major gas retailers also generators, so have choices regarding consumer energy supply
 - note the Government's direct use of gas modeling shows increased consumer benefits at the expense of electricity producer surplus, ie gas gives more for less

Industrial Responses



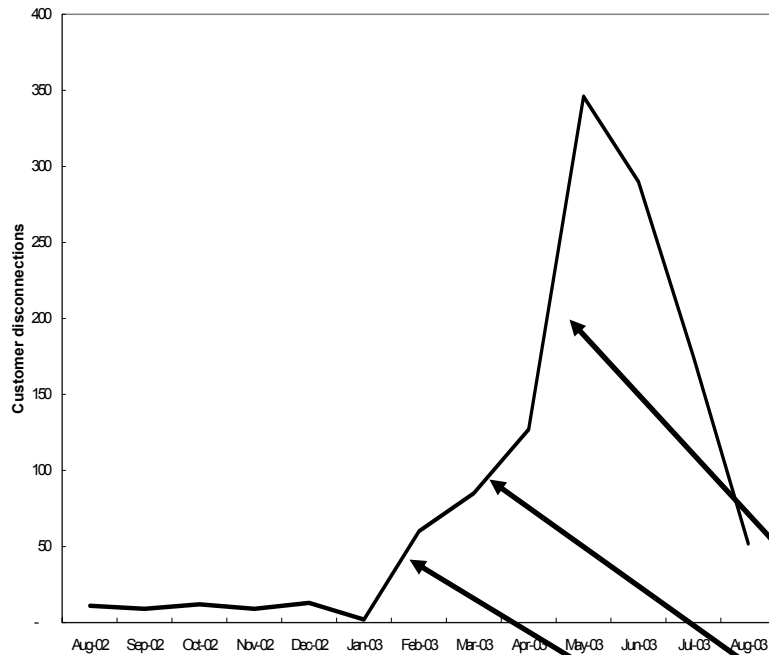
- Fuel availability/security now a driver
 - significant heat needs for own processes
 - energy costs significant and uncertain
- Not just an end of plant life decision
- Options - coal, wood waste, fuel oil, LPG
 - asphalt plant, existing fuel gas, alternative fuel waste oil
 - sawmill/wood dryer, existing fuel wood waste, looking at expansion but would need supplementary fuel, coal or gas
 - sawmill/wood dryer, one plant wood waste, threat to convert other one from gas
 - wood processing, existing fuel gas, alternative fuel coal, the consumer had retained coal-fired boiler in working order

Industrial Switching



- Capital costs not a barrier
 - if energy is a significant cost, what appear to be large investments can be quickly recouped

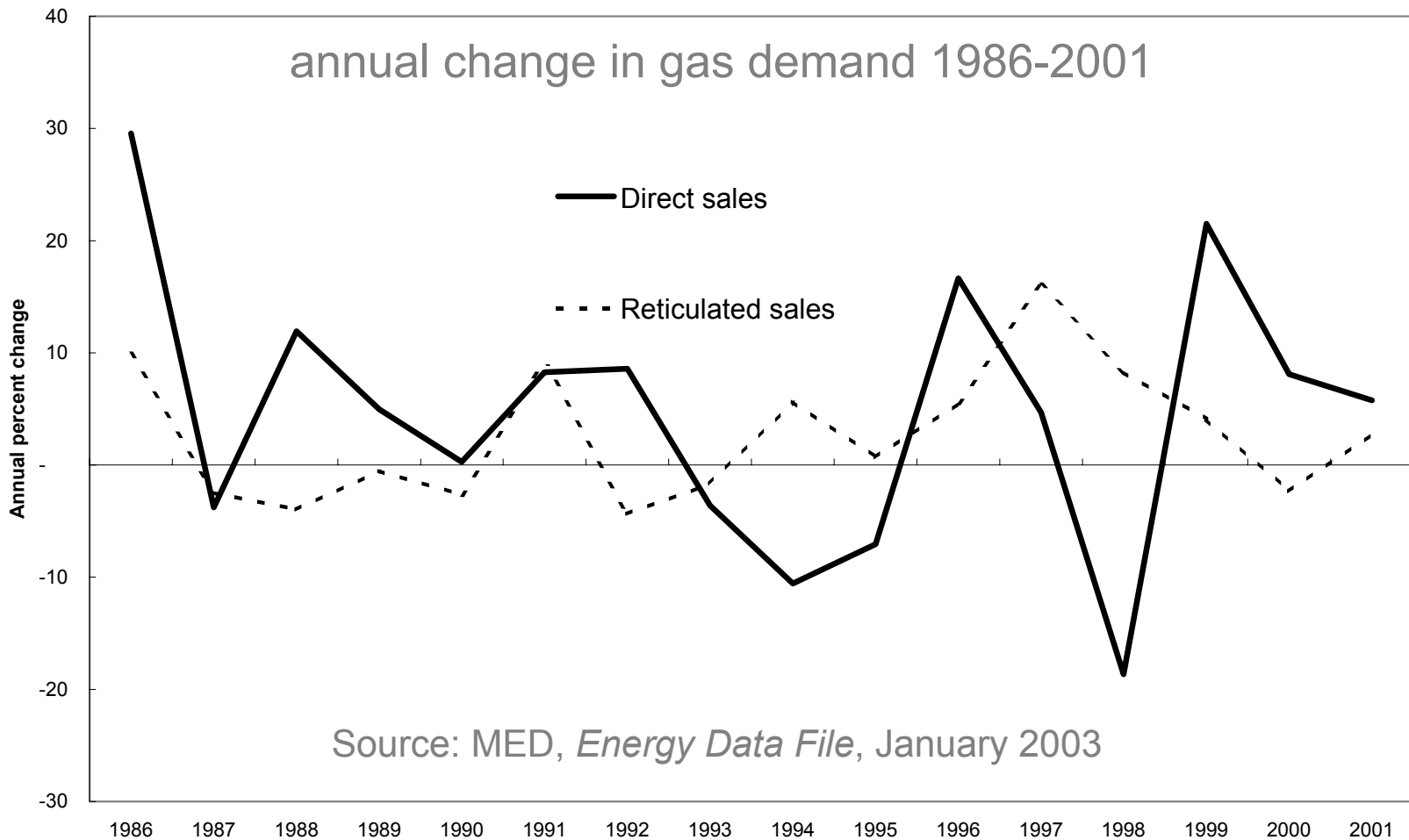
Residential Responses



NGC gas disconnections over the last year

- Inter-fuel competition again evident
 - Electricity the default
 - LPG, wood, coal
 - New technology, eg heat pumps
 - Retailer determines the price structure, note the reaction to fixed charges
- impact on bills implemented announced

Demand Variability

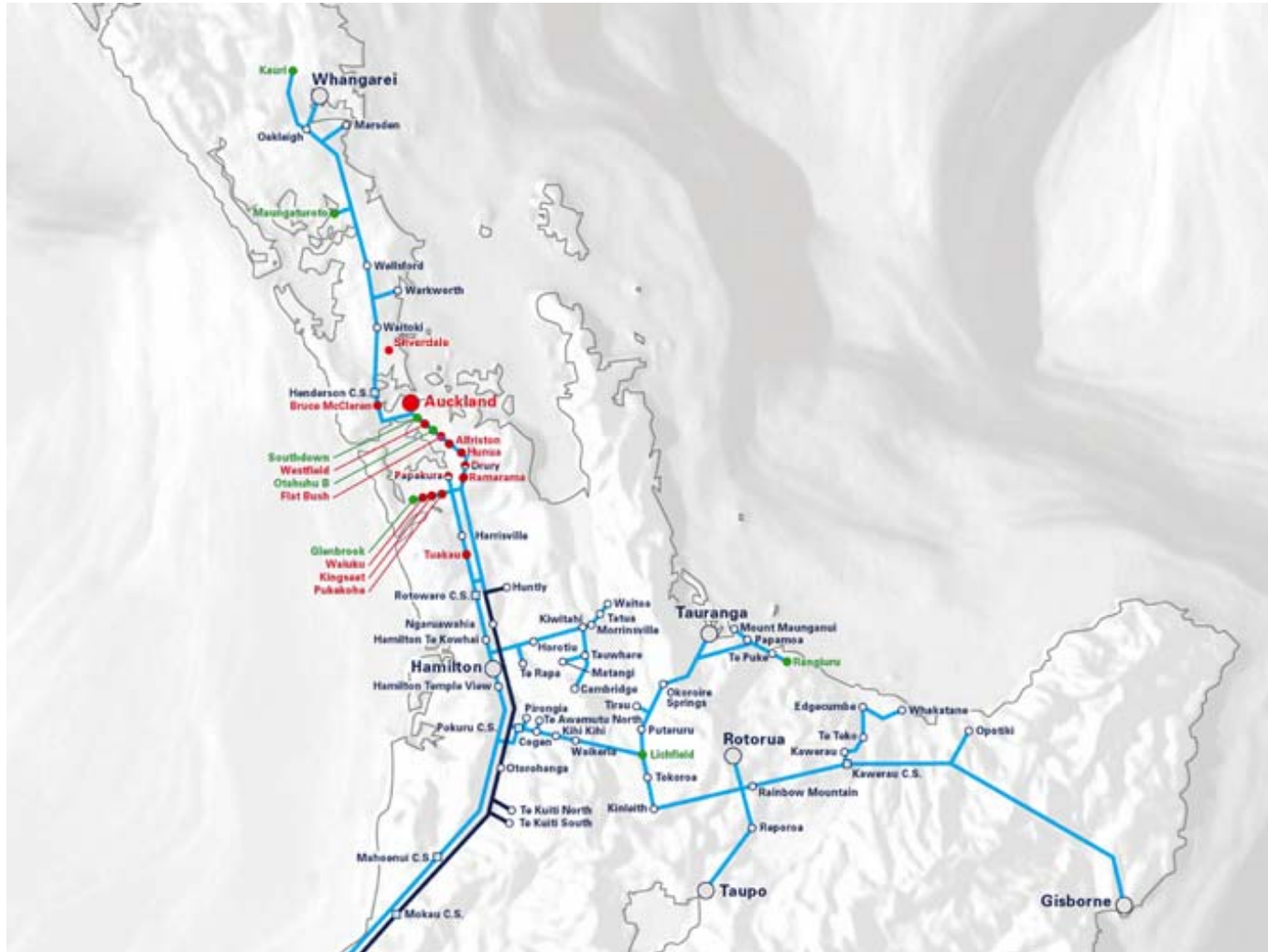


NGC Transportation History I



- History of transmission investment
- Changes in upstream and downstream gas markets impact transportation asset
- Kapuni to Huntly pipeline
 - built in 1969, bypassed a decade (the much larger Maui pipeline)
 - had been completely optimised out under ODV
- Kapuni to Wellington pipeline
 - built in 1968, substantially reinforced (looped) as demand in Wellington and the Hutt Valley grew through the 1980's
 - many industries in the Hutt Valley closed or moved in the 90's
 - now substantially oversized, so optimized down under ODV

Upper North Island



NGC Transportation History II



- Gisborne pipeline
 - built in 1984 on the prospect of continued support from the “Big 4”; the Hospital, Watties, Gisborne Refrigerating and Advanced Meats
 - latter two have closed, and Watties has moved to Hastings
 - other industries have emerged but only half the pipeline capacity is used
 - substantial economic value written down under ODV
- Northland pipeline
 - built in 1985
 - dairy factories have closed as Fonterra emerged
 - substantial economic value written down

NGC Transportation Position



- System operator role more difficult now
- Long stringy transmission system with a few/single customers in different areas
- Major downstream sectors face international competition, so very real risk of stranding or economic writedown
- Transmission - seven standard TSAs, 28 special TSAs to retain load (Contact, NGC, Nova and Wanganui)

food/byproducts	6	asphalt / lime	5
wood processing	9	health	3
dairy	2	energy	3
- Six term TSAs to match long term investments, eg power stations
- Distribution - six standard NSAs, 42 special NSAs

NGC Network Marketing



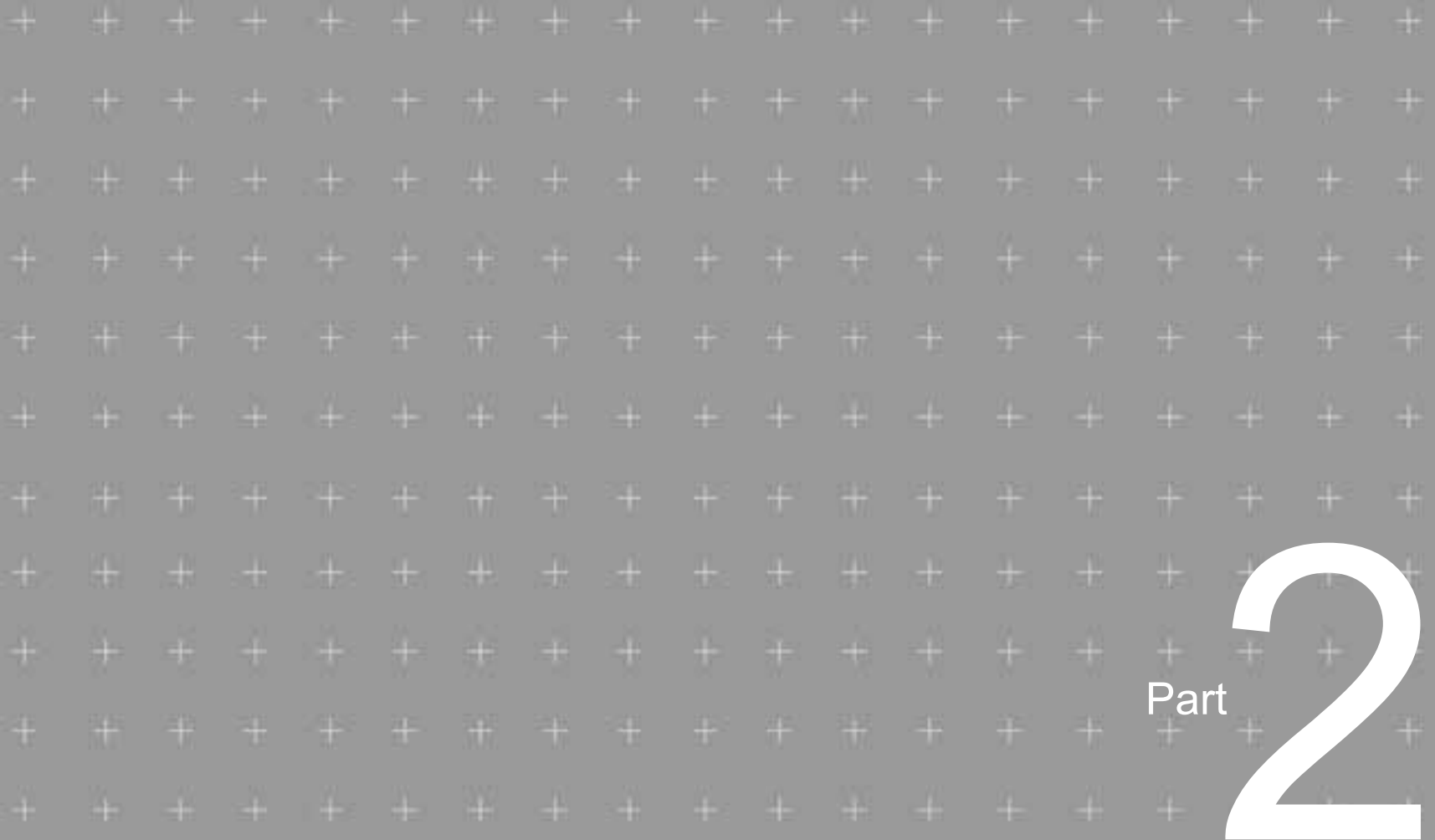
- Increase system utilisation, so minimise upfront cost
 - free connections for first 25 meters
- Specialist utilisation team internally
- Some components of the marketing plan
 - re-focussed targets
 - large increase for existing homes gives a more even split
 - awareness raising through generic marketing
 - gas promotion as a lifestyle choice
 - maintain relationships with suppliers and plumbers
 - new homes connections
 - target developers and trades people
 - subdivision barbecues
 - loyalty schemes
 - existing home connections
 - training for gas (channel) partners
 - promotions with gas partners
 - home shows, mall displays, street parties

Summary - Gas Market



- Declining supply
- Greater inter-fuel competition
- Transportation demand driven by other markets (upstream and downstream)
- Some assets have been stranded/written down
- NGC encouraging use of gas and its system
- Requirement for marketing is different from electricity

Investment Decisions



Investments Required

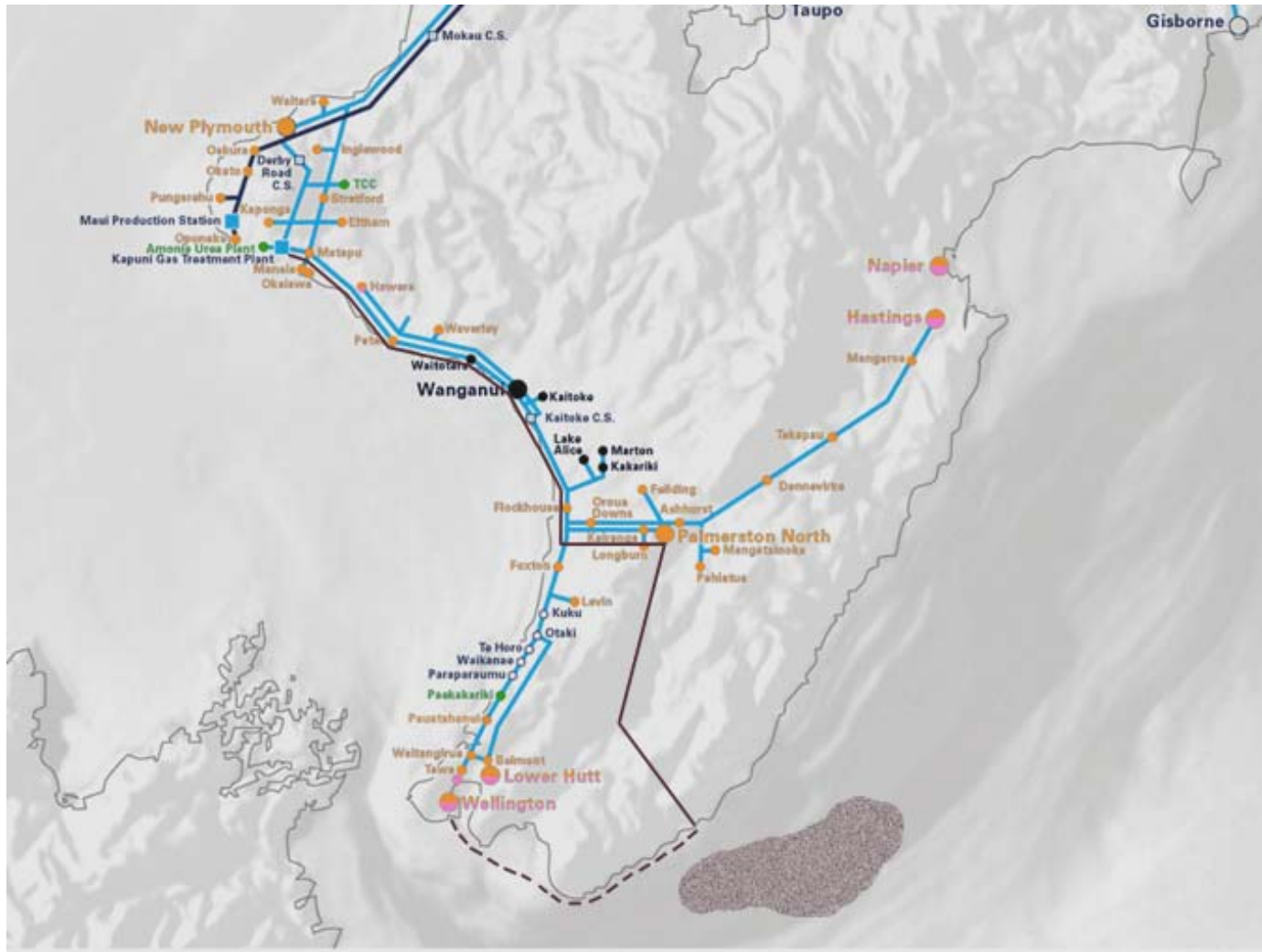


- Key Context
 - Investment to maintain existing asset value
 - Existing pipes oriented to Maui
 - New investment required post-Maui
 - Upstream investment: new fields
 - Downstream investment: demand shifts
 - Pipeline investment decisions follow

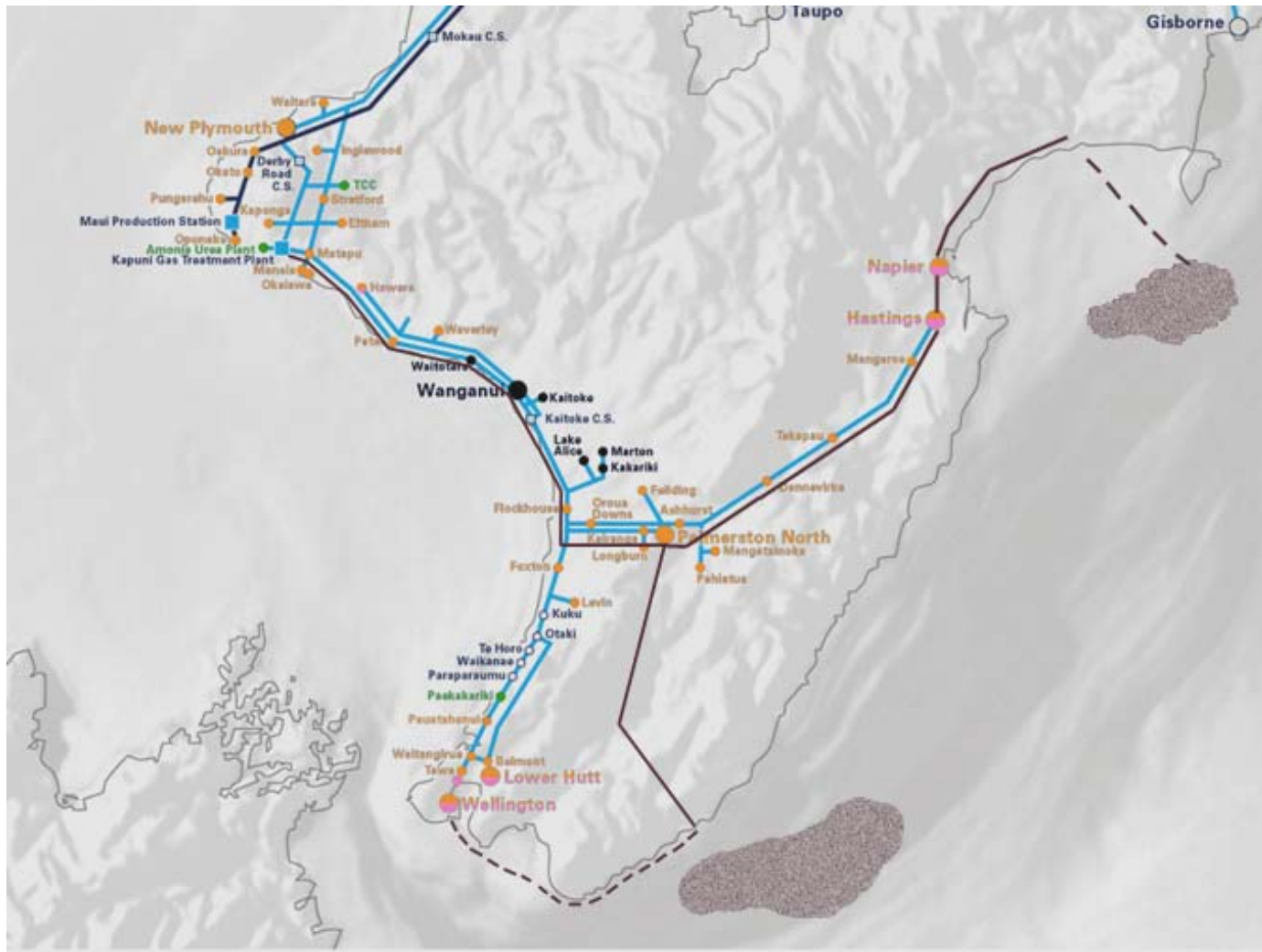
- New fields:
 - Pohokura
 - Wairarapa
 - East Coast

- Demand shift:
 - Auckland reinforcement
 - Power generation
 - Residential growth

Off-Shore Wairarapa Field



East Coast Field

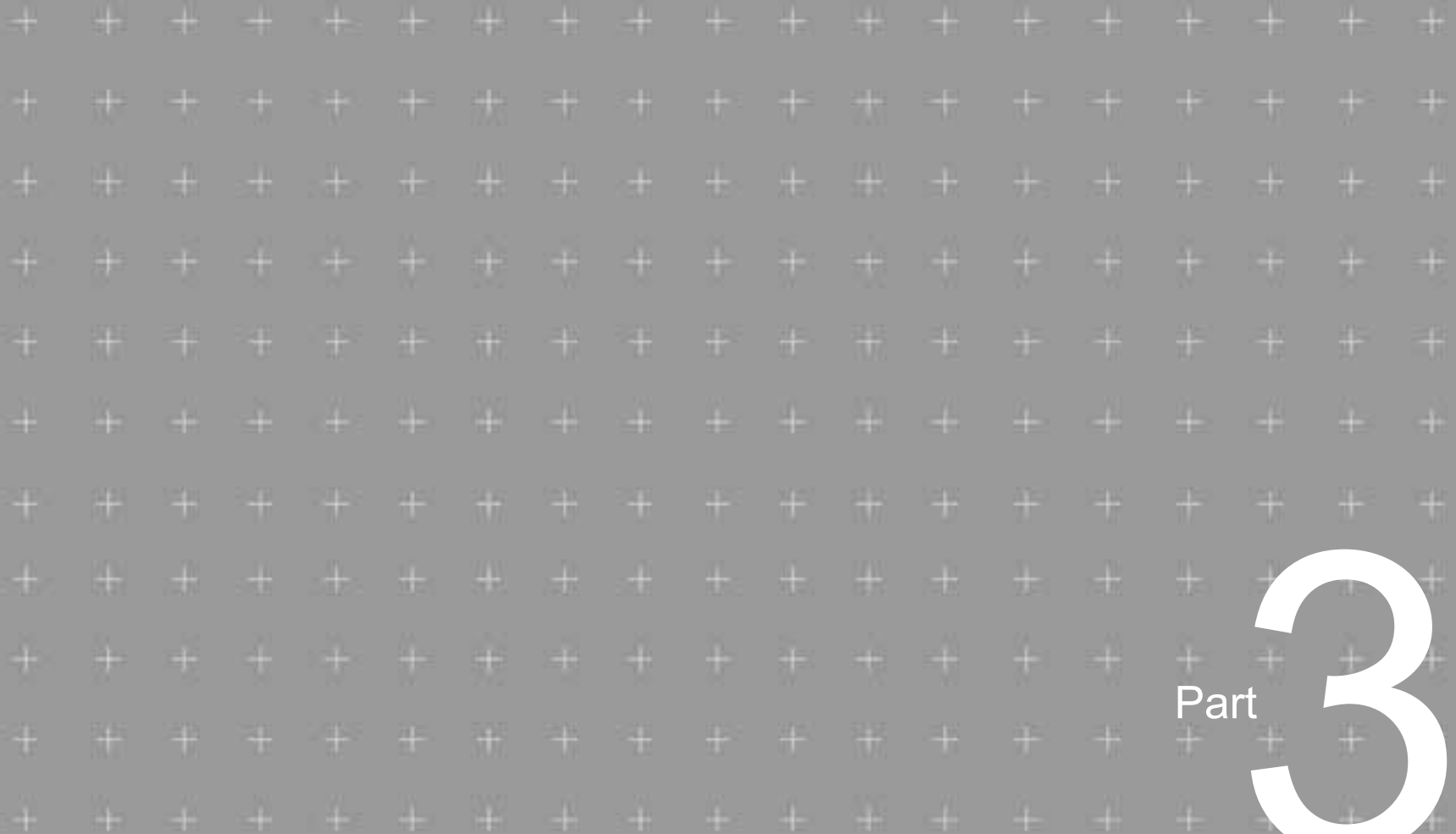


Summary - Investments



- Changing market requires continued investment
- History confirms key investment risks
- Clear investment context required for decision making
- Investments contestable

Scope of the Inquiry



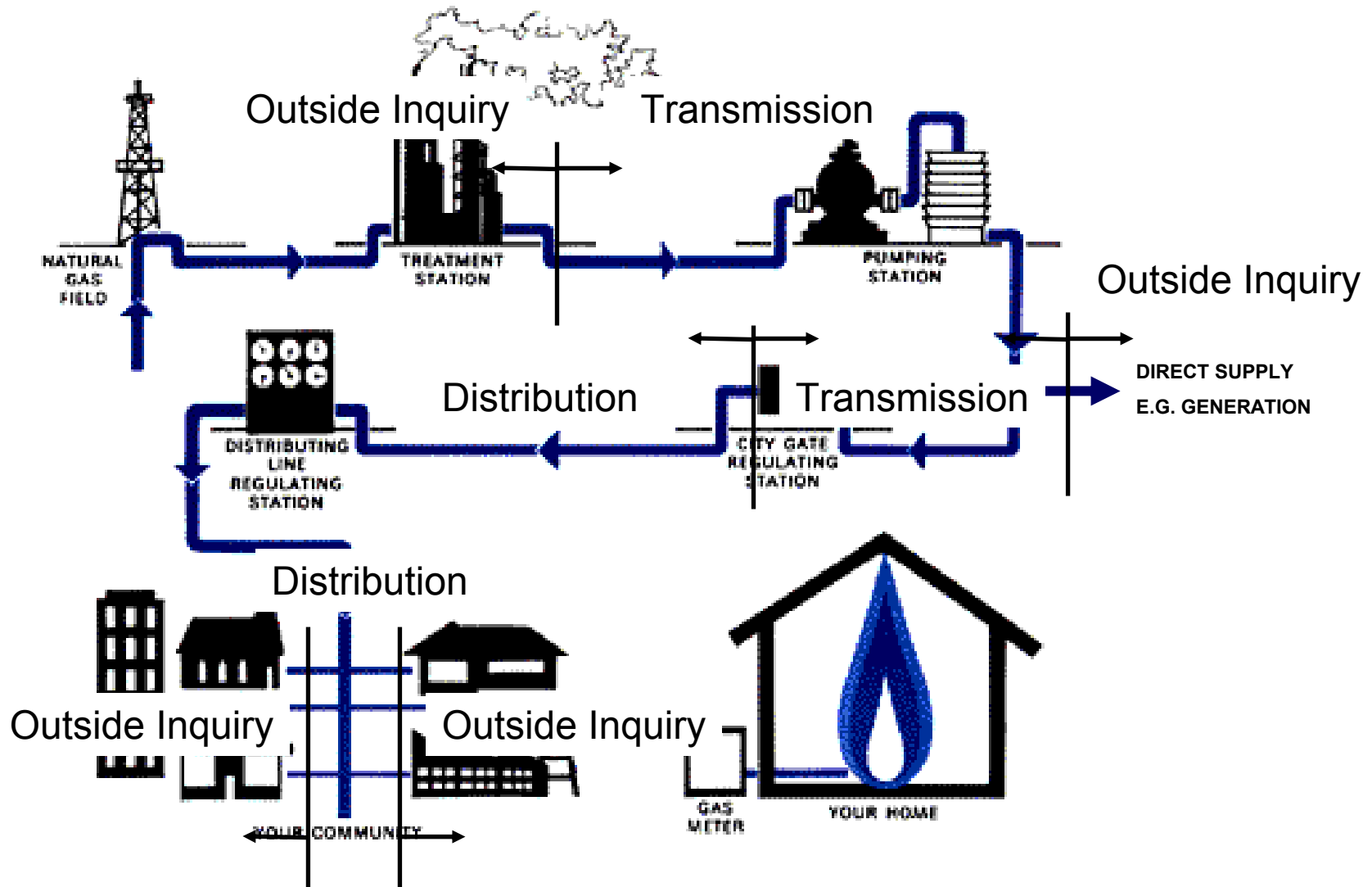
Part 3

Scope of the Inquiry



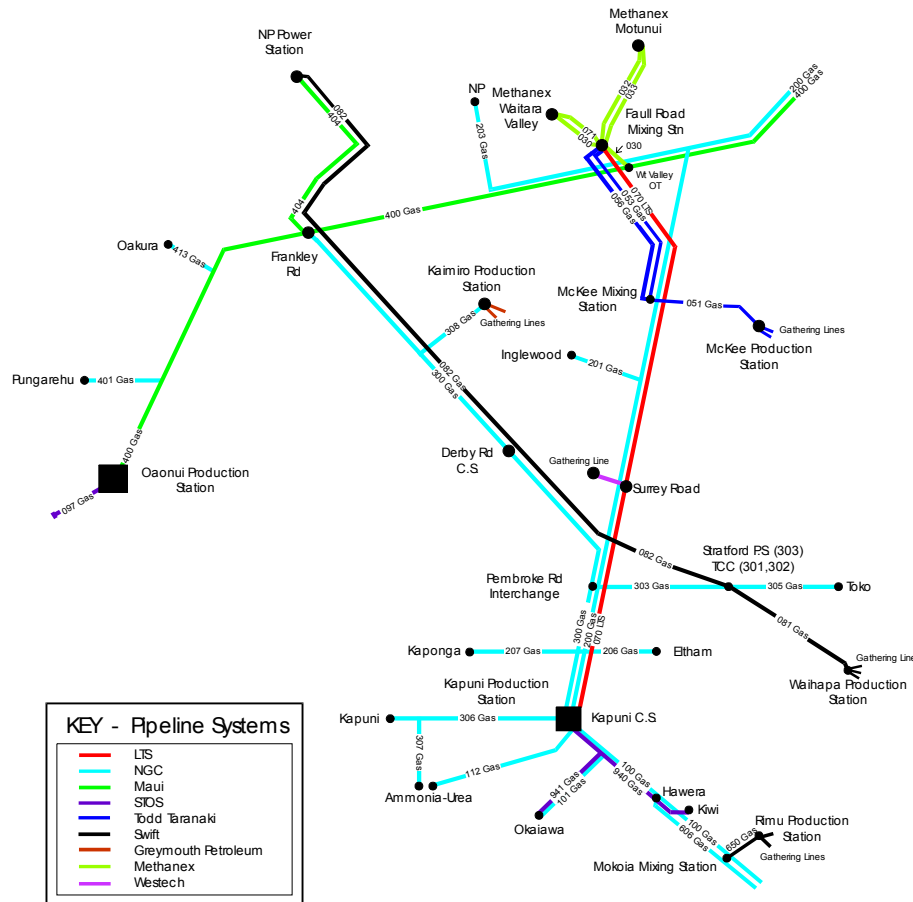
- NZ Gas Supply Chain
- Activities Outside Inquiry
- Services Outside Inquiry
- Services within Inquiry

Generic Gas Supply Chain



PIPELINE SCHEMATIC

for Pipelines, Laterals & Compressors
TARANAKI

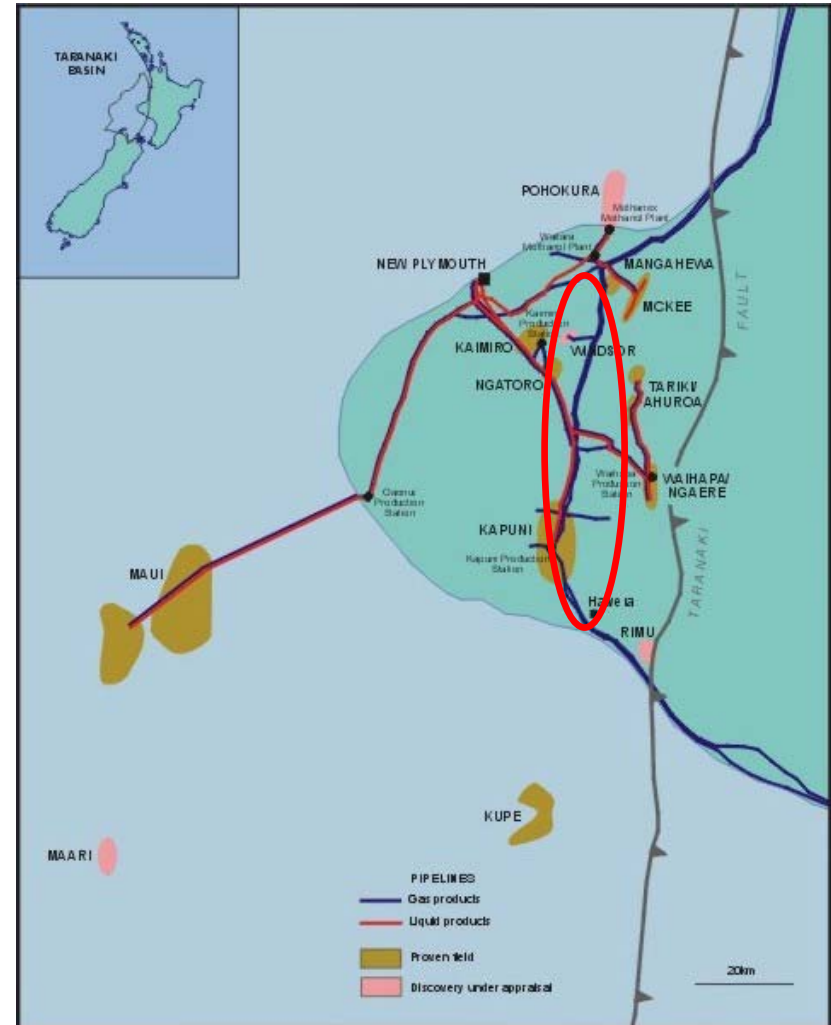


- Gas gathering pipelines are excluded
- McKee transmission pipelines overlooked
- Network of pipelines and range of owners indicate that investment is contestable

NGC Energy Response



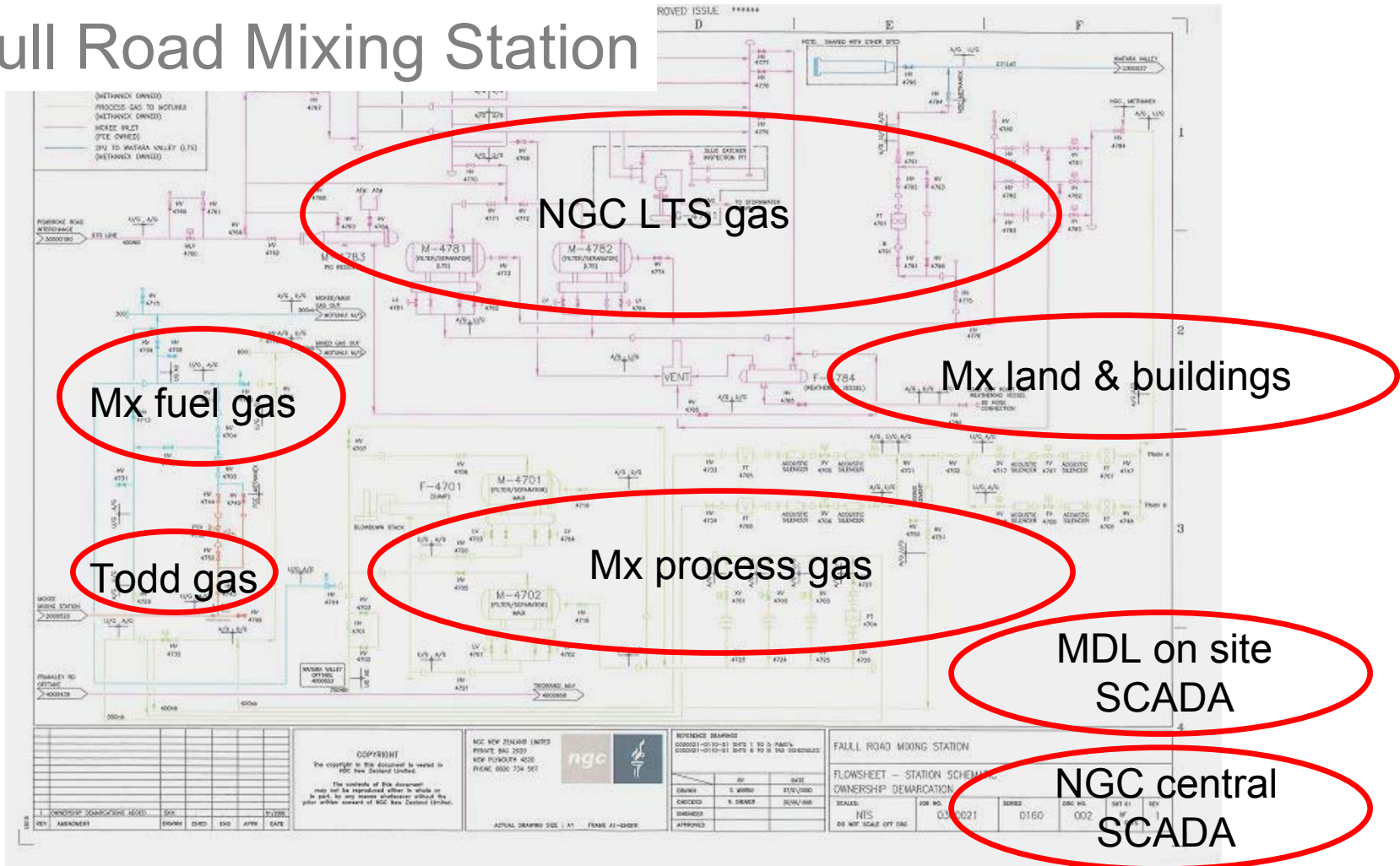
- NGC must shift to new gas sources
 - diversity of supply
- Smaller fields can become economic by sharing production facilities
- LTS pipeline to be used for gas gathering when Methanex exits (early 2004)
- Deals already implemented



Definitions are critical



Fault Road Mixing Station

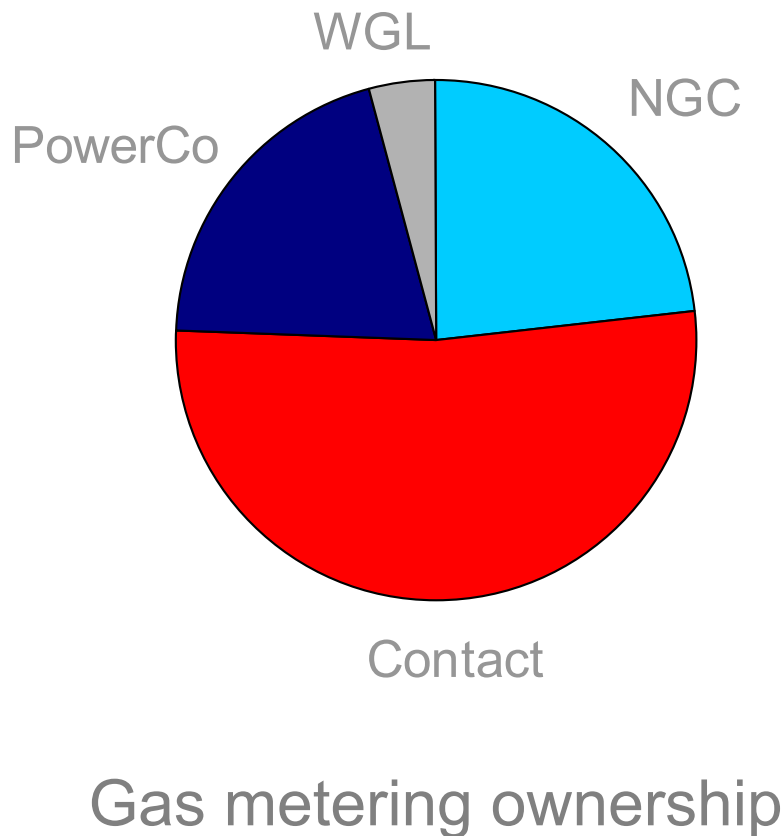


Services 'Connected with' pipeline services



- 'Connected with' connotes
 - Ownership by a pipeline business
 - A direct connection to that business
 - Asset owner must sell goods or services that use the assets, since s52 focuses on goods or services supplied in a market
- Inquiry is whether market power is being leveraged into other connected markets

Ancillary Activities (1)



- Metering is an unbundled and contestable service
- Within NGC it is in a different business unit
- NGC owns meters on other networks
- NZS 5259 specifies quality of metering & testing regime

Ancillary Activities (2)



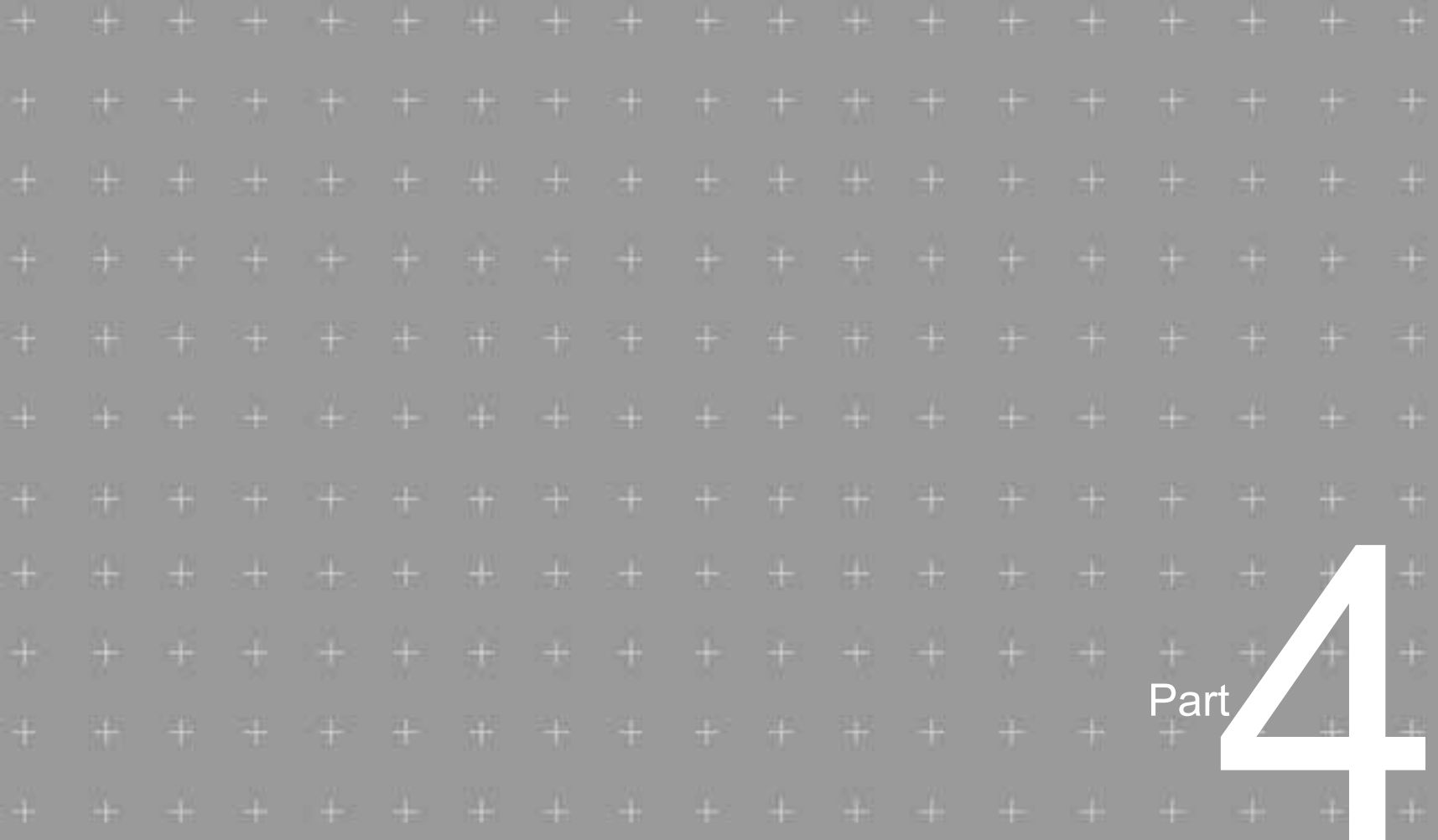
- meter installation process - contestable at each stage
 - user request to channel partner or retailer
 - retailer request to metering company
 - network company specification of pressure and location
 - metering company acquisition of meter (for larger sizes there is a cost assessment and fabrication process)
 - metering company request to installer
 - retailer arranges meter reading (metering company may offer specialised reading services)

Services Outside the Inquiry



- Third party services
 - pipeline operation, eg Maui pipeline
 - metering inspection
 - calibration of meters
 - easement services
 - surveying
 - pipeline and station service/maintenance
 - monitoring and upgrading of gas fire detection systems
 - data provision

Regulatory Regime



Part **4**

Regulatory Regime



- Mix of central and self regulation to date
- Current Regime
- Proposed Regime

Current Regime – Open Access



- Legislative Framework
 - Commerce Act
 - Gas Act, Ministry of Energy (Abolition) Act
 - Information Disclosure Regulations
- Self Regulatory Codes
 - NZ Pipeline Access Code
 - Information Memoranda
 - Confidentiality Protocols
 - Reconciliation Code
- Contracts
 - Transmission & Network Services Agreements
 - Allocation Agreements
 - Gas Sale Agreements

Transition to Open Access



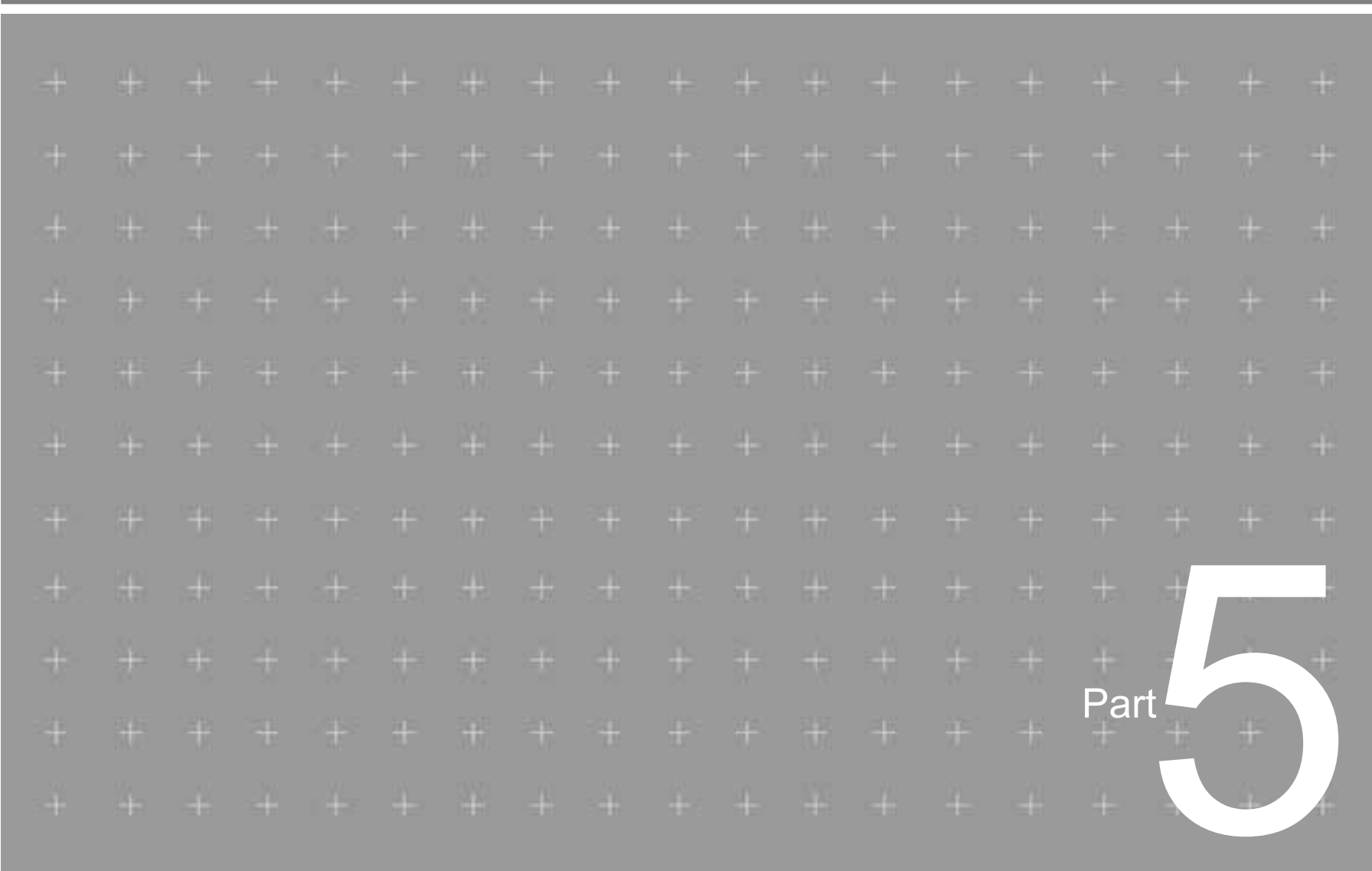
- Official encouragement to abolish franchise areas and 1980 contracts (Commission, MoC)
- Progress monitored closely - “regulatory bargain”
- Long negotiation on the Access Code 1992-98
- Gas House included acquirers and owners
 - BHP, Contact, ECNZ, Enerco, FCE, Methanex, NGCT, NGC Gas Companies, Nova, PowerCo, Shell, TransAlta, Wanganui Gas
- Long consultation on new pricing methodology related to portion of the system used, ie distance-related
- Acquirers promoted ODV valuation
- Negotiated solution abolished 1980 contracts and allowed open access on networks (ie competition)

Proposed Regime



- Counterfactual: likely to develop in Inquiry timeframe
- Extensive Gas Review process over last two years
- Cabinet has reconfirmed a strengthened disclosure regime
 - ODV handbook, use of ACAM, updated financial and performance measures, internet disclosure
- Government Policy Statement requires a new governance structure
 - Co-regulation or Energy Commission
 - legislation for backstop regulation is being prepared
- The Commission is implementing a control thresholds regime for electricity lines businesses which will serve as a de facto regime for gas
 - following this process the Commission will have extensive knowledge of gas pipeline businesses so it could intervene quickly

Asset Base & Valuation



Part **5**

Asset Base and Valuation



- Regulatory Compact
- Recent Investments
- Stakeholder Views
- Easements

Regulatory Compact



- Two levels to the compact
 - deregulation process by Government
 - open access process overseen by Government & Commission
- From 1990 it was apparent ODV was the regulatory valuation
 - Government consultation indicated it was an appropriate approach, in fact MoC threatened to use it if *“inappropriate valuations are being adopted”*
 - Transpower valued at ODV - suggested as a benchmark for NGC
 - First NGC ODV in 1991
 - Clear to investors that NGC was using ODV
- Cabinet mandated the use of an ODV Handbook for gas in 2000 as part of information disclosure enhancements following extensive consultation with industry
- Cabinet reconfirmed these enhancements including the interim promulgation of the ODV Handbook

Stakeholder Support for ODV



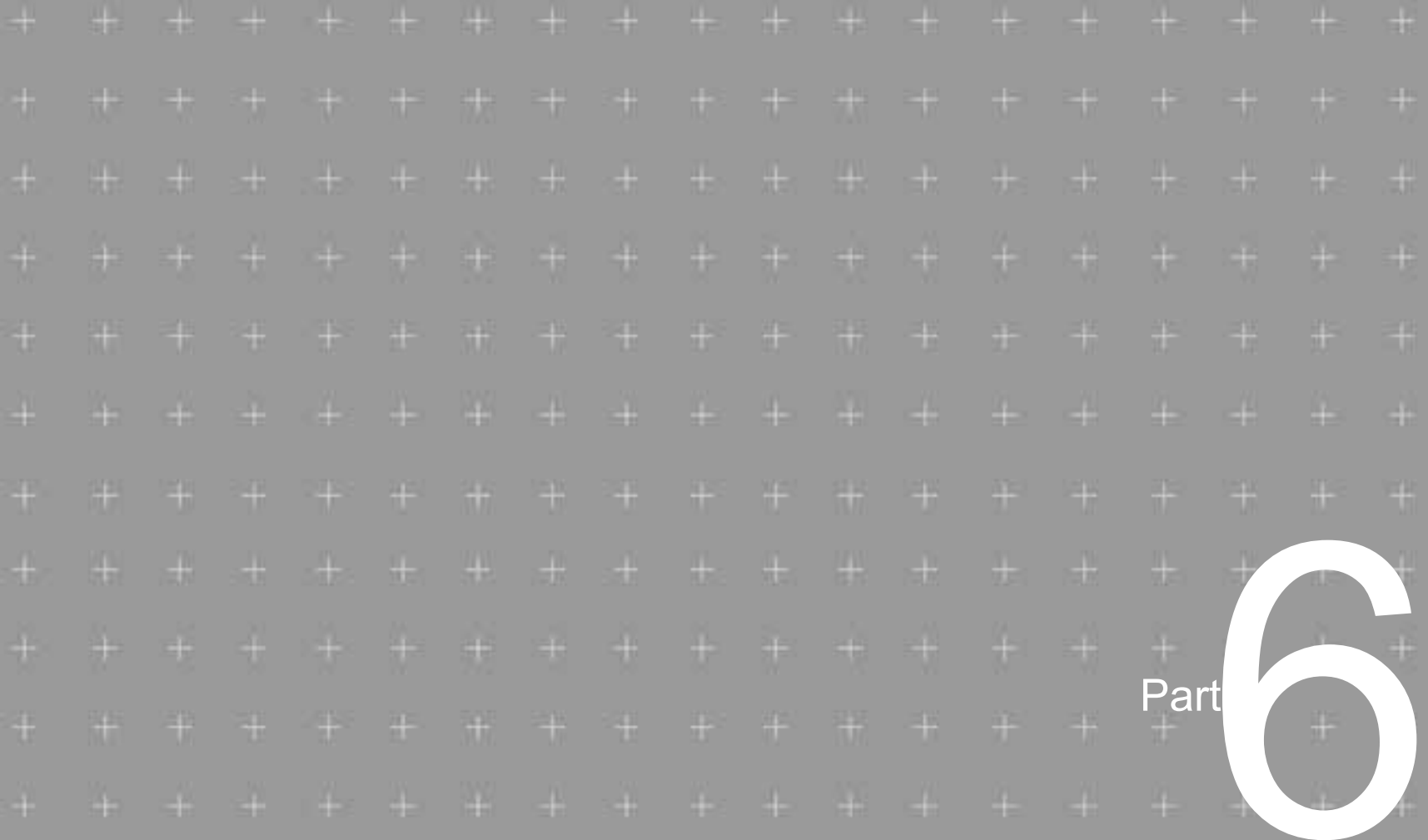
- Transmission acquirers promoted the ODV methodology during the transition to Open Access
- Contact, Genesis & Mighty River supported ODV during the Gas Review process
- MEUG supported consistency between electricity and gas during the Gas Review process
- The Government's consultants for the Gas Review, ACIL, supported the use of ODV
- Generally, acquirers' comments indicate a desire for transparency and consistency in the application of the ODV methodology with some wanting a one-off audit to confirm asset bases

Intangibles and Easements



- Intangibles
 - Asset management systems
 - Long-term contracts
 - Growth options have value (outside ODV planning horizon)
- Easements
 - New entrant would have to pay
 - Transmission was different to distribution
 - NGC paid historically, much was payment in kind (fencing, tracks etc)
 - NGC would have to pay now
 - Auckland
 - designation even though Otahuhu C on hold
 - encroachment a major concern

Summary



Part

6

Summary Points on Framework



- Dynamic market post-Maui
- More risk than electricity as a high degree of inter-fuel competition
- Changing regulatory environment
- Appropriate asset valuation is ODV
- Significant risks not recognised in Commission's approach to WACC
- Costs of price control are likely to outweigh the benefits