

GENESIS ENERGY

Customer Perspective

2006 Petroleum Conference

March 2006

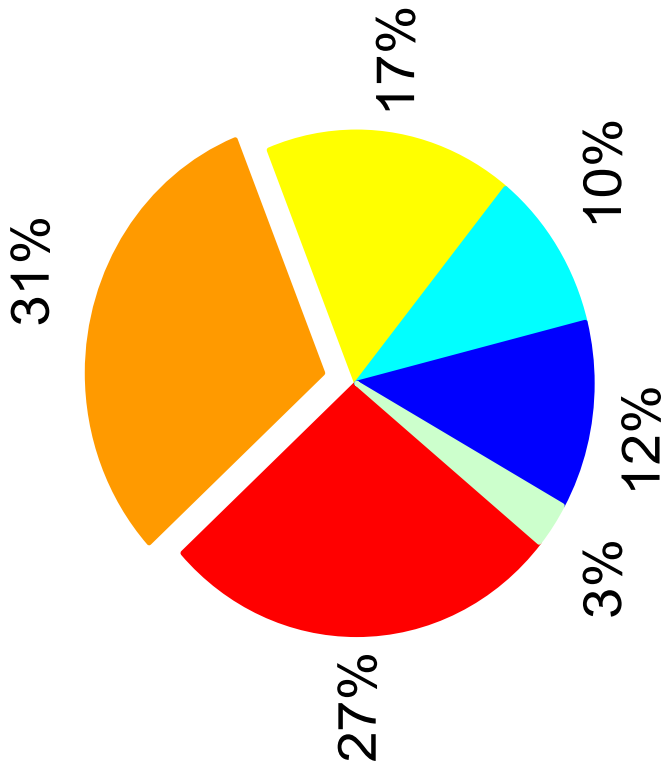
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Agenda

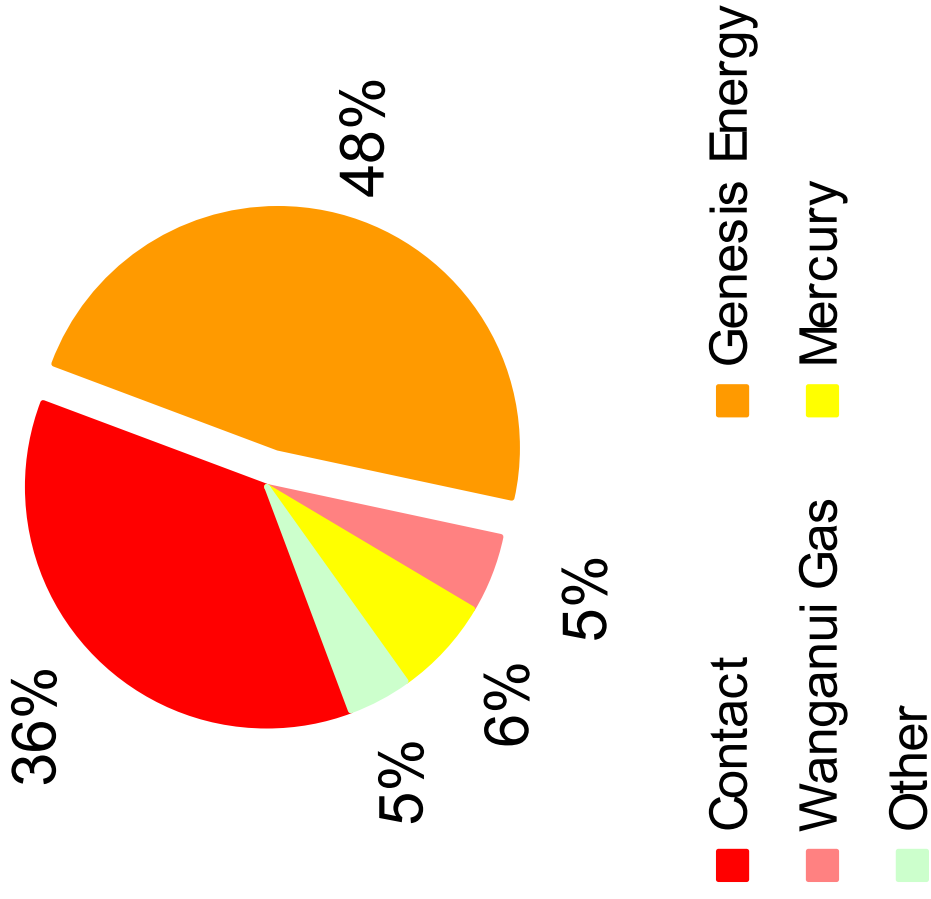
- **Genesis Energy's market role**
- Ongoing requirement for gas turbines
- Customer requirements for gas supply
- Customer perspective of domestic gas industry
- Alternative supply options

Electricity Retail (by ICP)



- Contact
- Mercury
- TrustPower
- Genesis Energy
- Meridian
- Todd / Others

Gas Retail



Generation Assets - Thermal



Huntly Power Station

4 Units at 250MW

Local and imported coal supply

Generation Investments - Huntly e3p



365MW CCGT

Commissioning
December 2006

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Huntly Gas Turbine



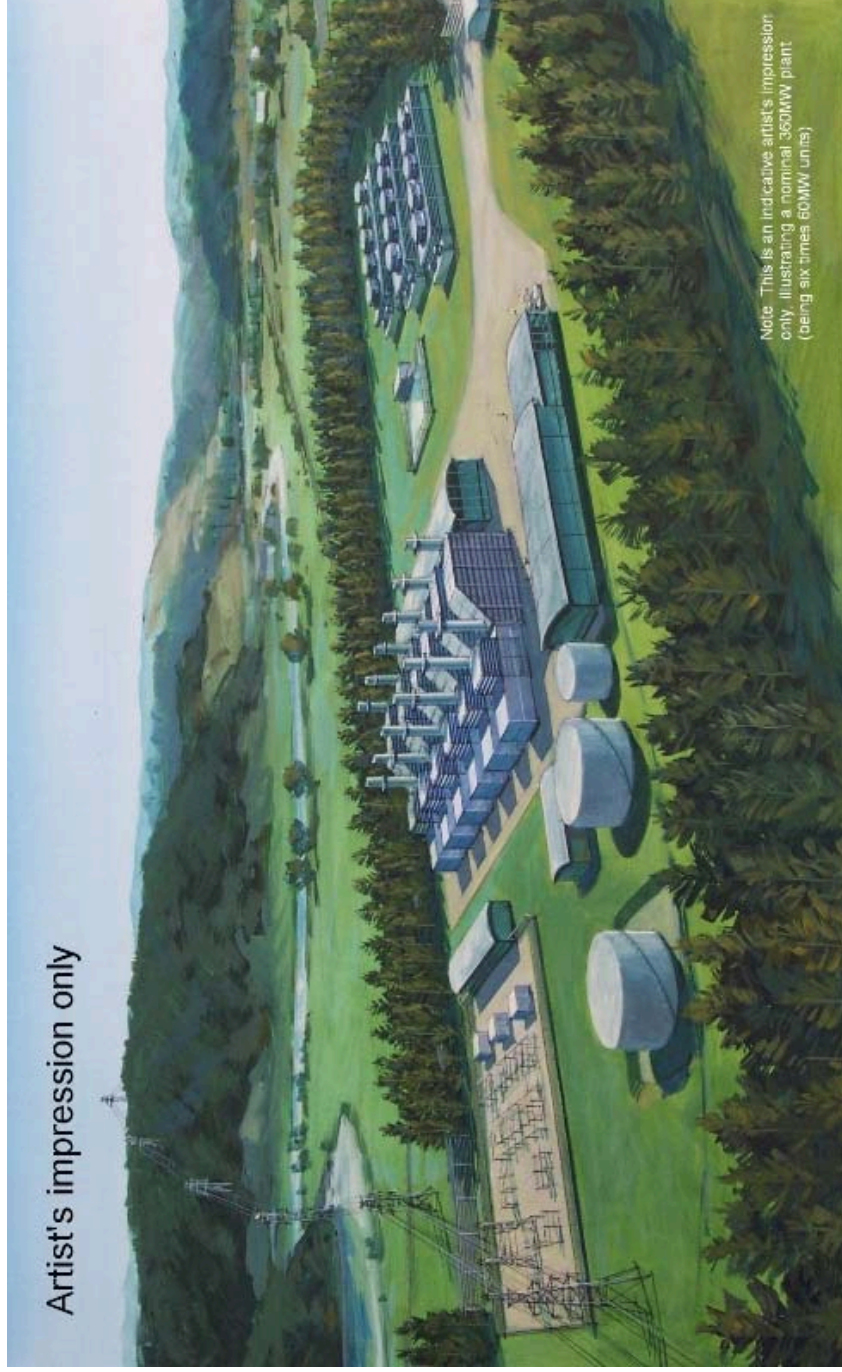
48MW OCGT

Commissioned
July 2004

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Rodney CCGT

Artist's impression only



Note: This is an indicative artist's impression only illustrating a nominal 360MW plant (being six times 60MW units)

3 x 120MW
Modules

* Subject to suitable gas supply contracts

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Generation Assets - Hydro



Tongariro Power Scheme

Rangipo – (120 MW)

Tokaanu – (240 MW)



Waikaremoana Power Scheme

Tuai – 60 MW

Piripaua – 42 MW

Kaitawa – 36 MW

Hau Nui Wind Farm Extension



5MW extension

Commissioned
December 2004

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Awhitu Wind Farm



20MW

Commissioning
September 2007

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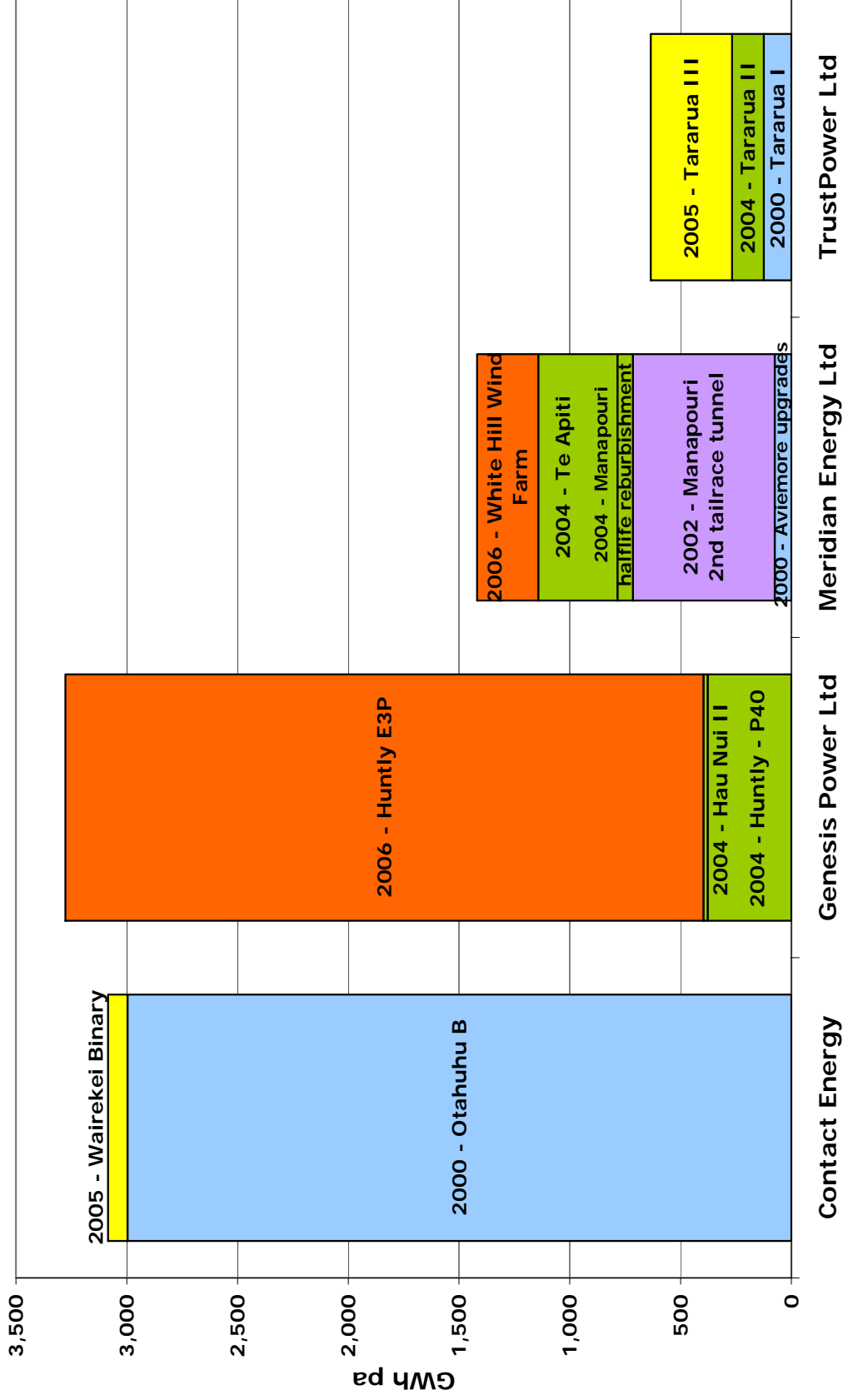
Summary of Genesis Energy Role in New Zealand

- Genesis Energy is a diverse generator
- Genesis Energy is the largest thermal generator in New Zealand
- Genesis Energy is an enthusiastic developer of renewable generation
- Genesis Energy is an active and successful investor in new wind generation
- Genesis Energy is the major contributor of new generation to the New Zealand grid

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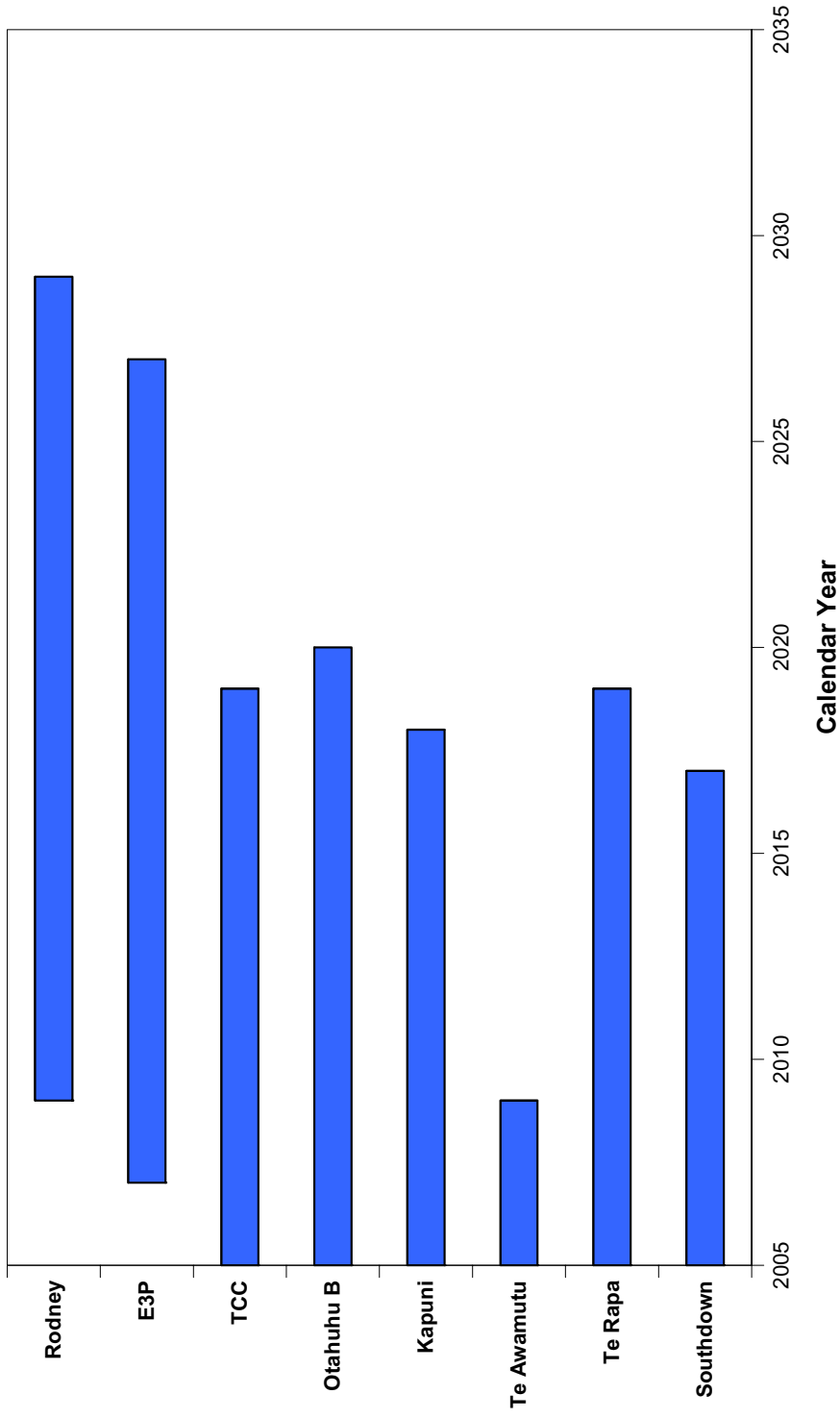
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New Generation 1999 - 2006

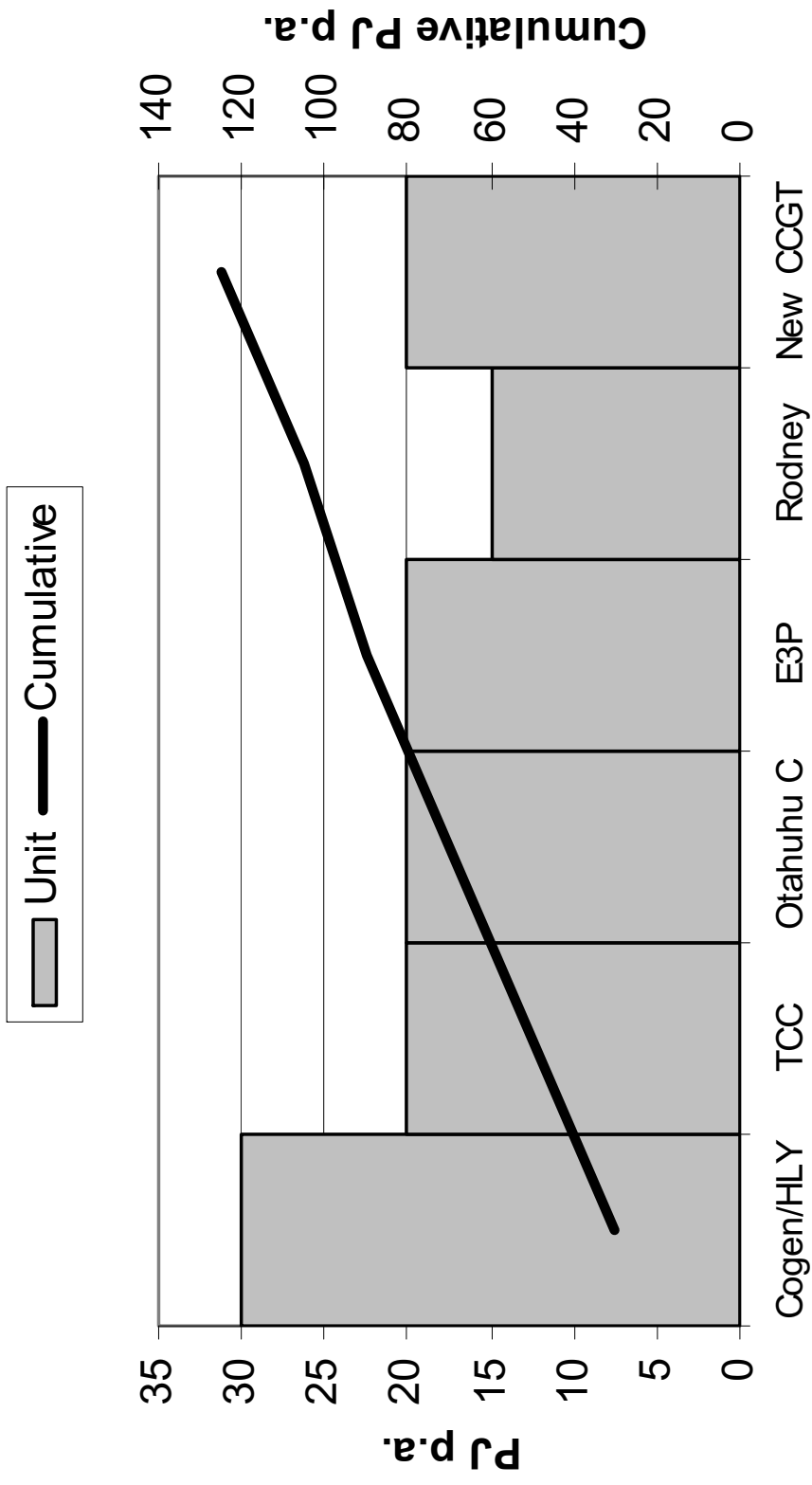


GT Remaining Life

Gas Turbine Remaining Life - Existing and Future

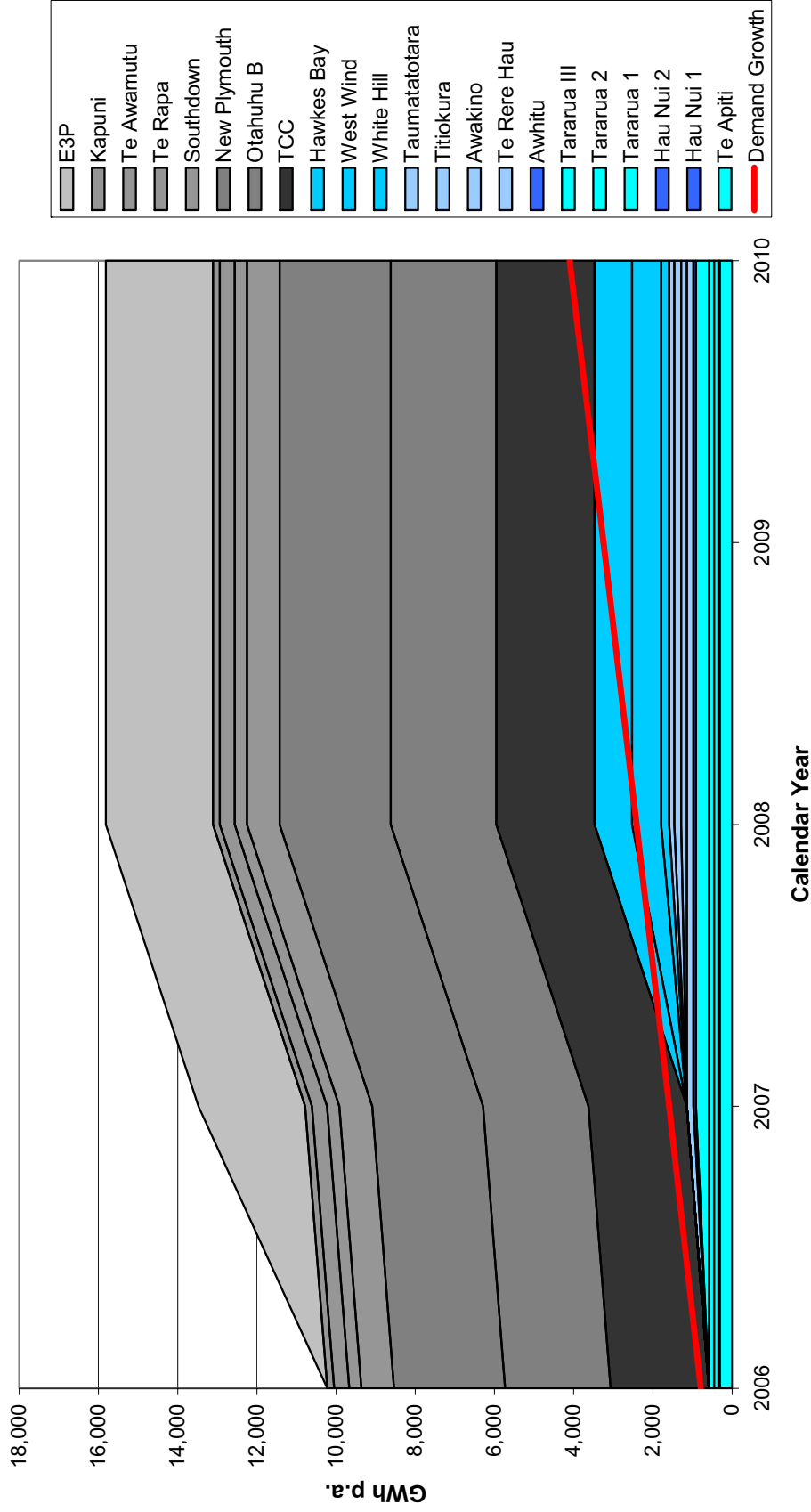


Generation Gas Demand by Plant



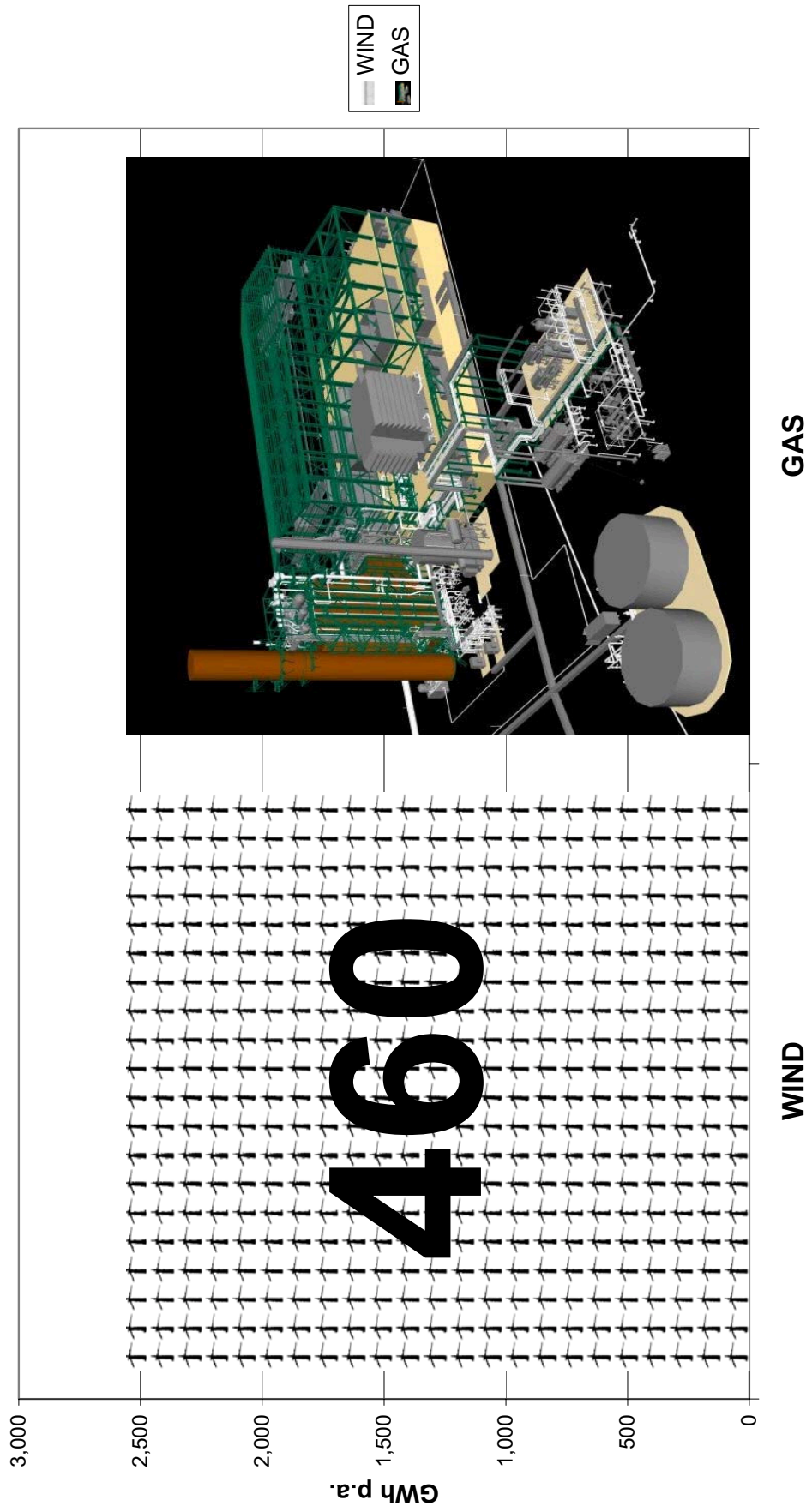
Gas and Wind with Demand Growth

Gas & Wind V Demand Growth



Wind vs. Gas Turbine Capacity

1.6MW Wind Turbines (LF=0.4) Required to Replace 365MW Gas Turbine (LF=0.8)



Replacing Gas with Wind

- 1 x 365MW Gas Turbine
→ **460 x 1.6MW Wind Turbines (0.4LF)**
- 12,300 GWh p.a. Gas Capacity (0.8 LF)
→ **1,755 x 1.6MW Wind Turbines (0.4 LF)**
- 760GWh (approx) demand growth p.a.
→ **135 x 1.6MW Wind Turbines (0.4 LF) p.a.**
- **Currently have 176 Wind Turbines** with combined capacity of 168MW = 590 GWh p.a. (0.4 LF)

Summary Ongoing Requirement for Gas Turbines

- New hydro developments not considered likely to displace existing CCGT/GT fleet
- New wind and other renewables might (hopefully) meet most demand growth if all planned projects are successful
- Existing OCGT and CCGT units must continue to operate, with plenty of room for wind generation

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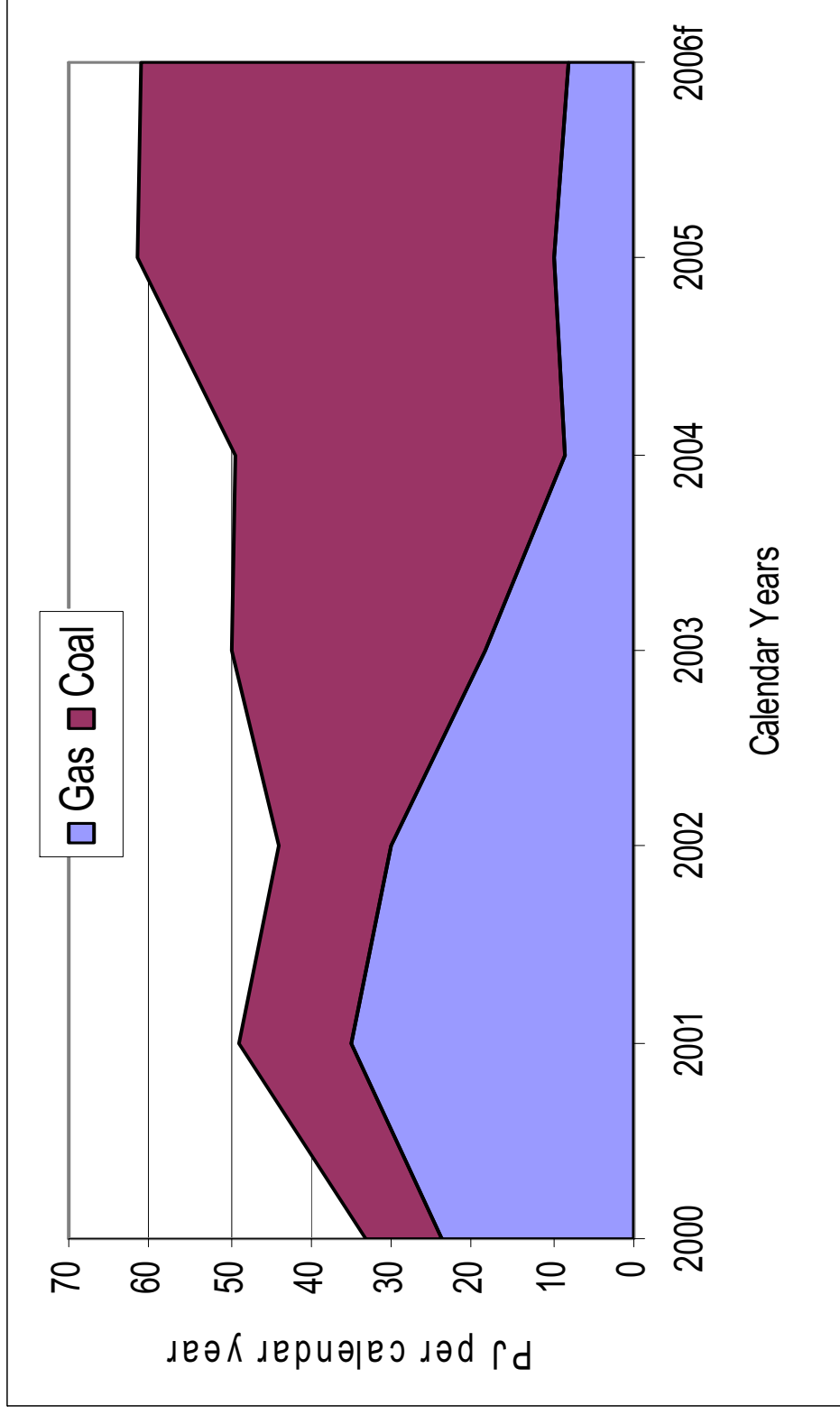
Customer Requirements for Gas Supply

- Firm GSA's with up to 10 + year terms
- Recognition of operational reality – flexibility in take
- Adequacy, consistency and success of exploration activity
- Information released in responsible credible manner concerning future reserves
- Portfolio of long term contracts, durations and fields required to manage risk / fund new investment

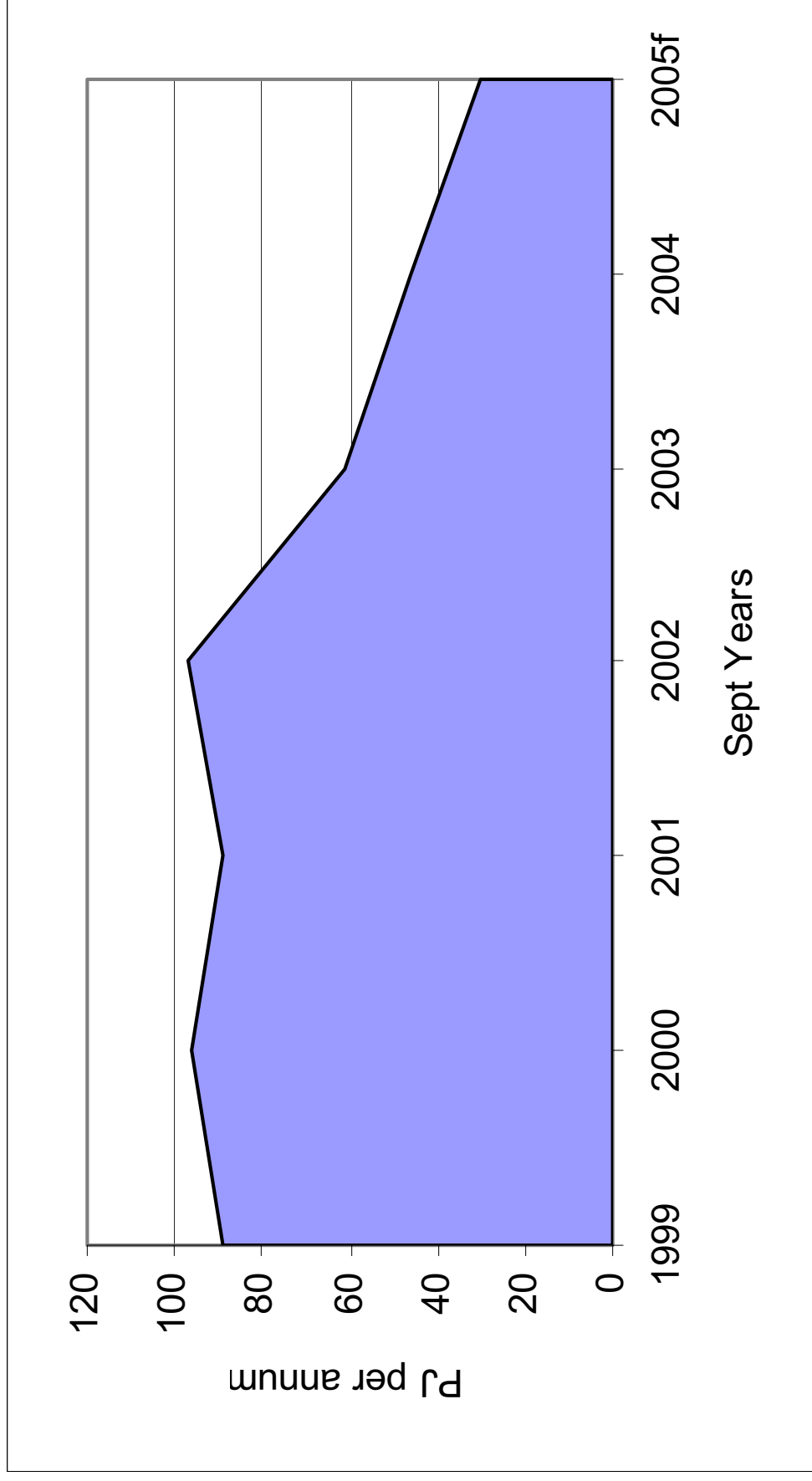
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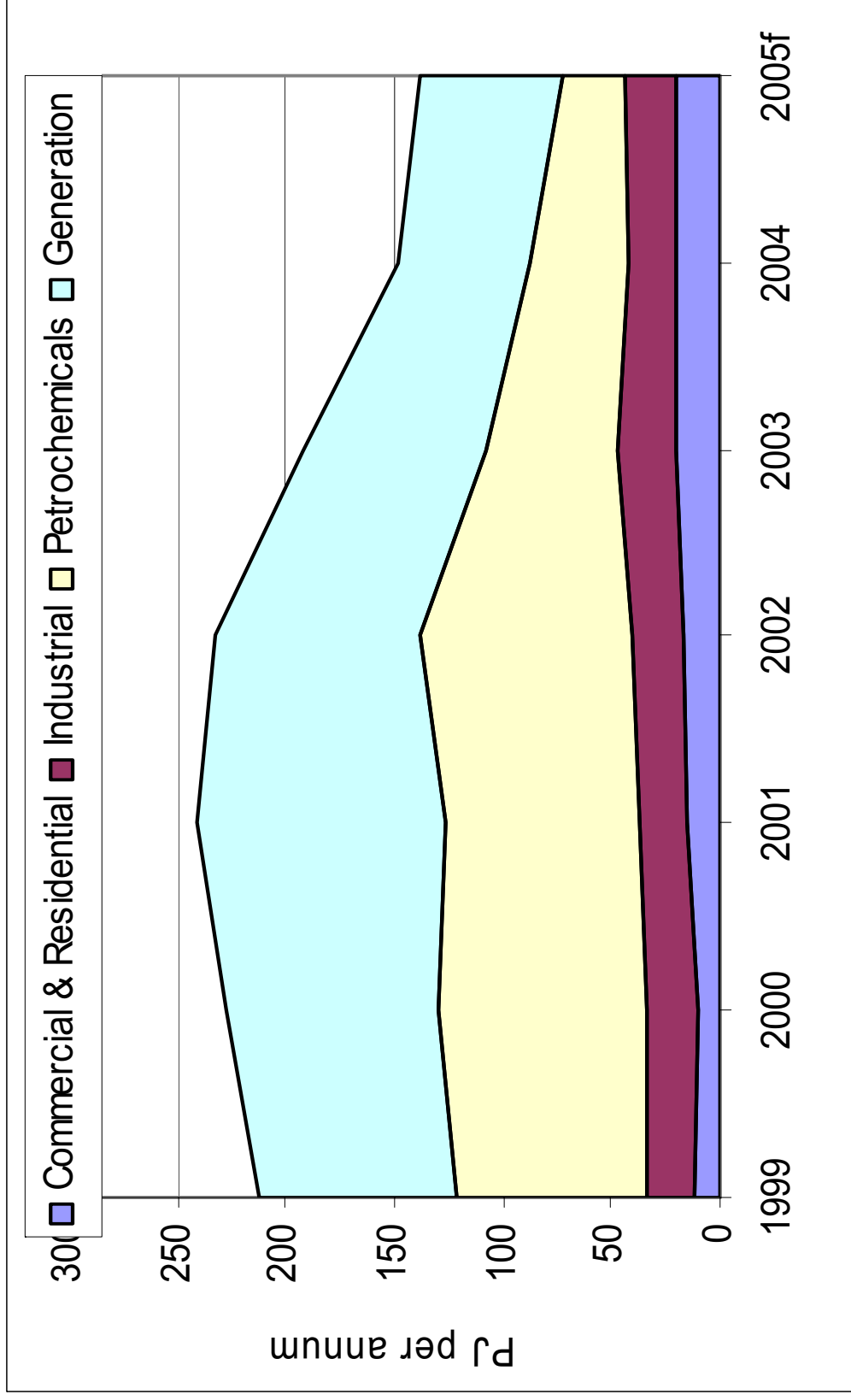
Huntly Power Station Fuel Mix



NZ Petrochemical Gas Demand

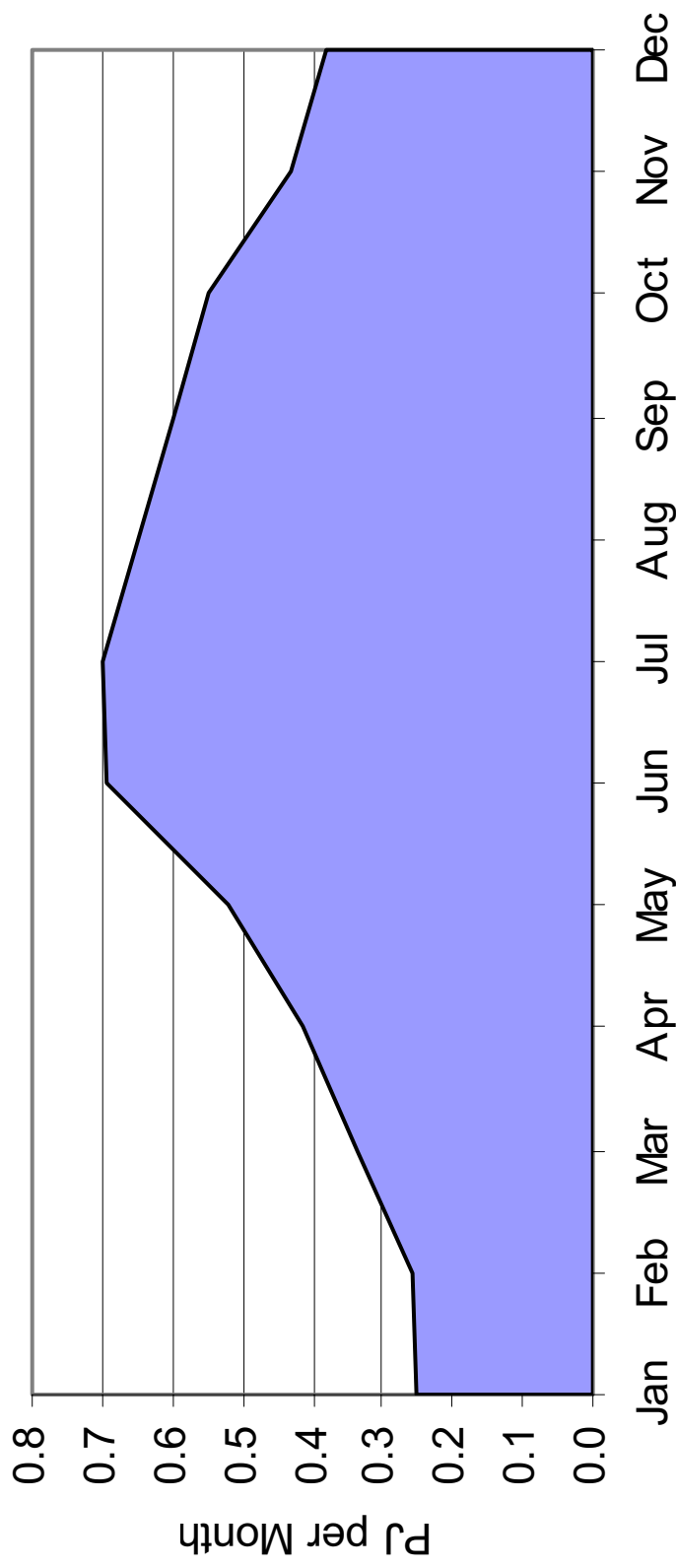


NZ Gas Market by Sector



Genesis Energy Retail Gas Profile

Annual Retail Demand Profile



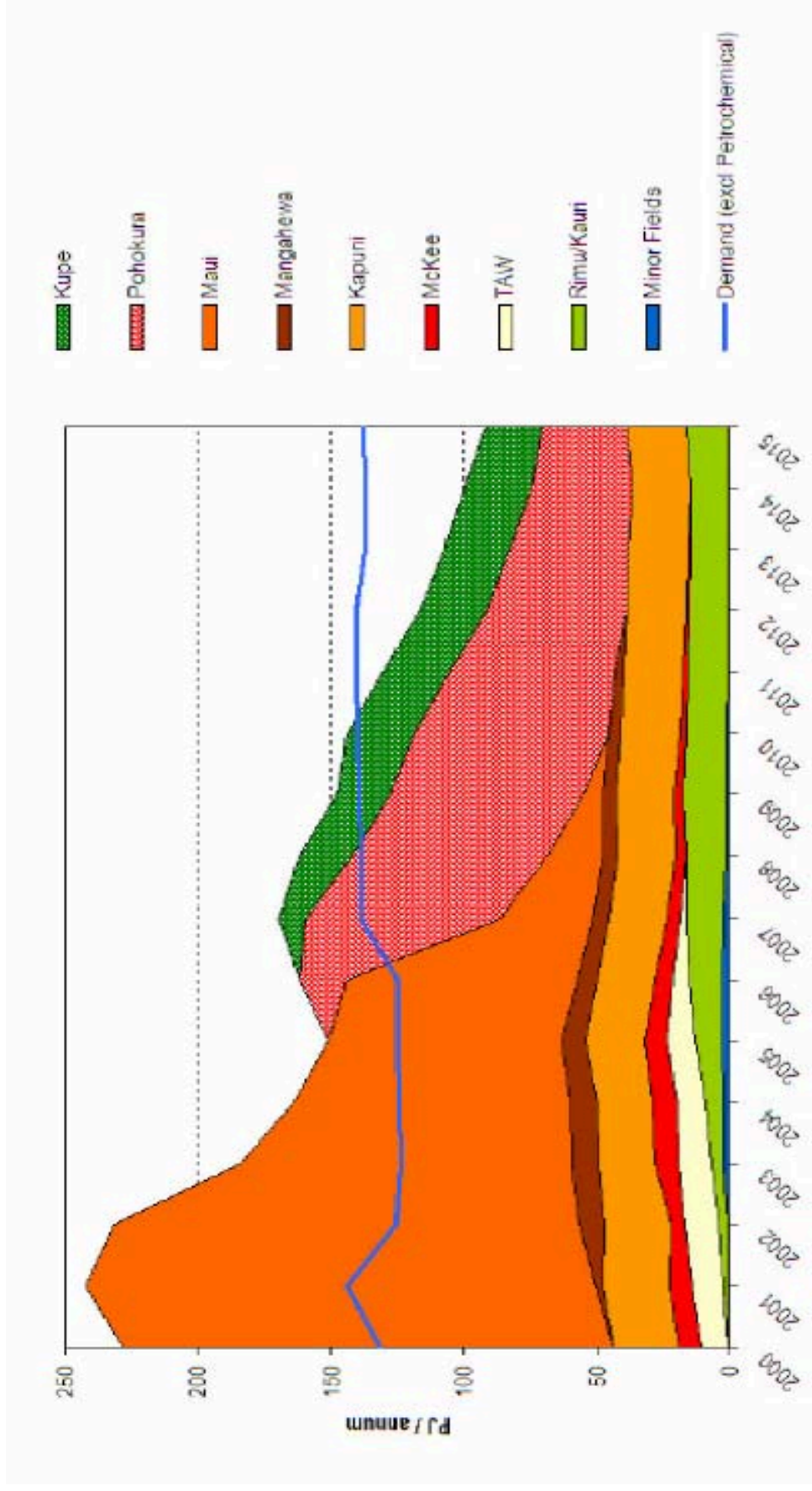
Customer View of Performance

- Confidence in gas supply is fragile
- Gas market has declined significantly driven from the supply side – reasonable concern
- Reliable information for future supply limited
- Exploration activity and success are limited in context of 80 – 120 PJ/ yr
- Firm supply contract availability and long term price transparency is poor
- Flexibility in-take has disappeared from new contracts

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Gas Reserves and Demand

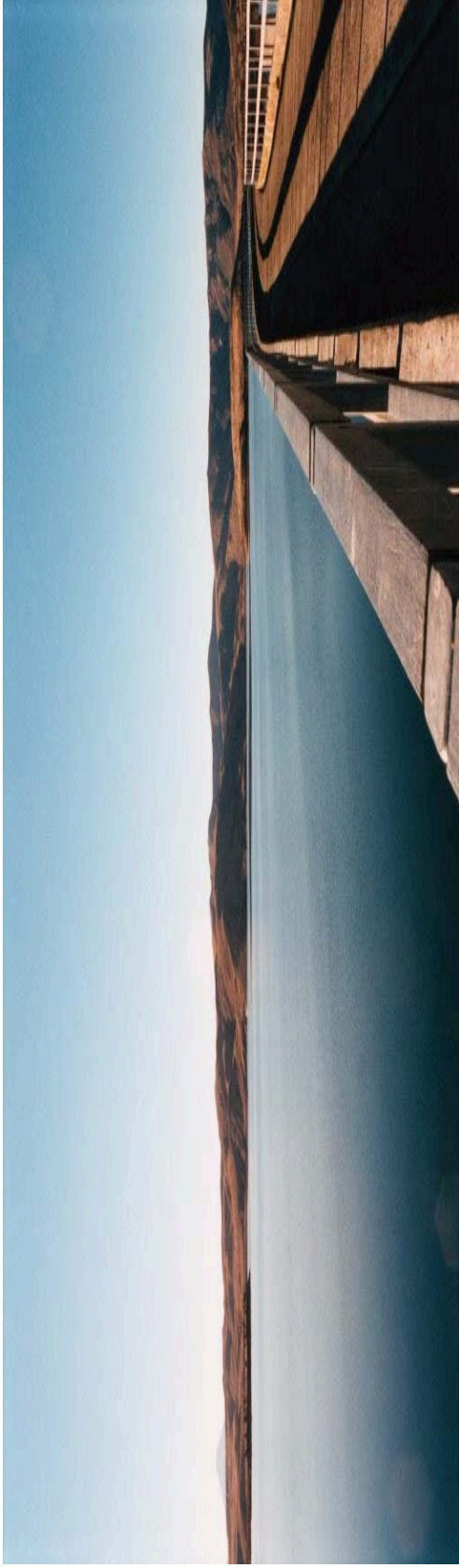


LPG – Real Option Development

- Genesis Energy and Contact as major asset owners are seeking to develop a real option for fuel – LNG
- Ongoing energy security is the issue – hope is insufficient. We need to plan to achieve seamless fuel supply
- The option will only be exercised when confidence in domestic supply adequacy fails

Conclusions

- All new renewable generation is encouraged by Genesis Energy
- Existing CCGT's at a minimum must continue to operate
- Any interruption to gas supply is unacceptable
- LNG is an option asset owners must develop
- LNG can co-exist with domestic gas and maintain it's market
- When and if the option is exercised depends on the level of customer confidence in domestic supply



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