



ES&M



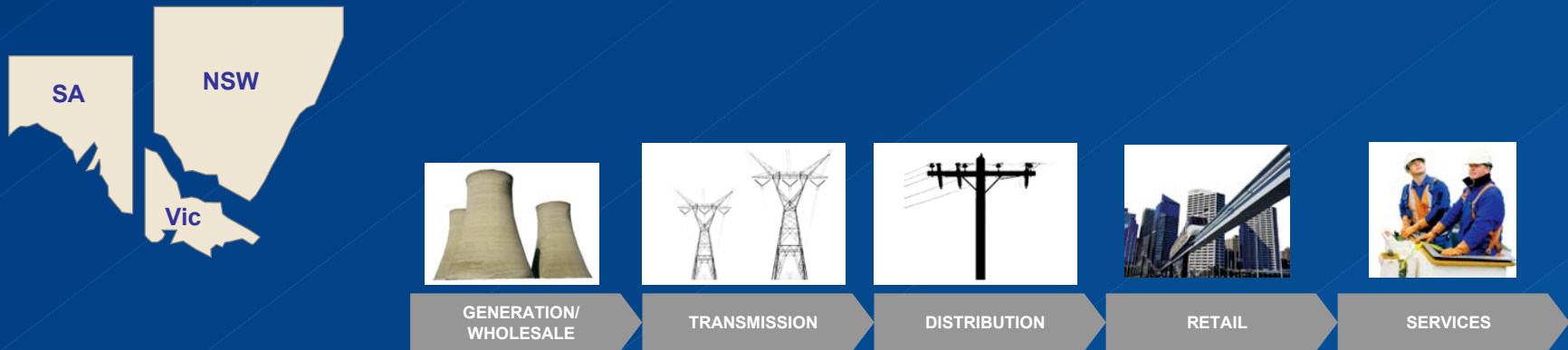
Bob Grant, GM Finance ES&M

Wholesale Energy Risk Management

AGL's Risk Management System is:

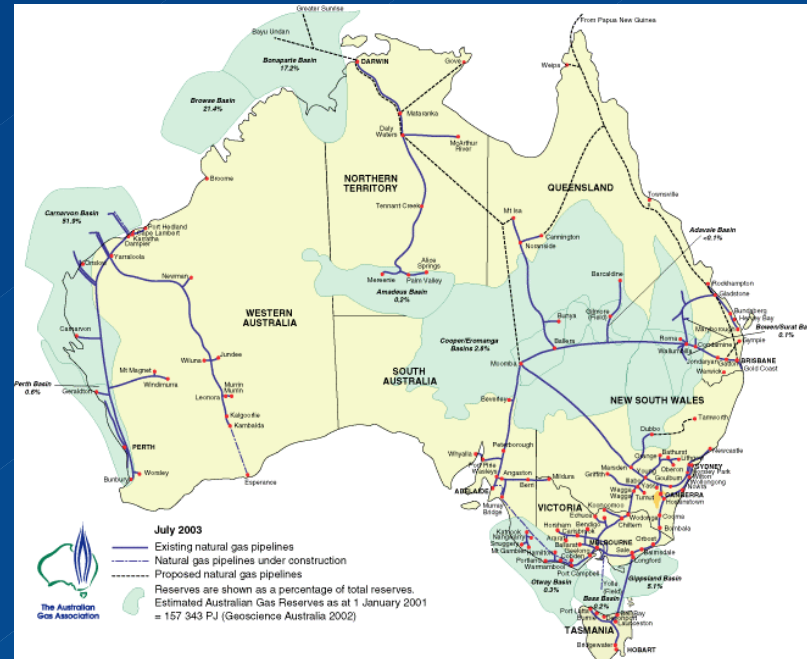
- appropriate for the business
- industry best practice
- integrated into the business
 - strong risk culture
 - strong governance structure





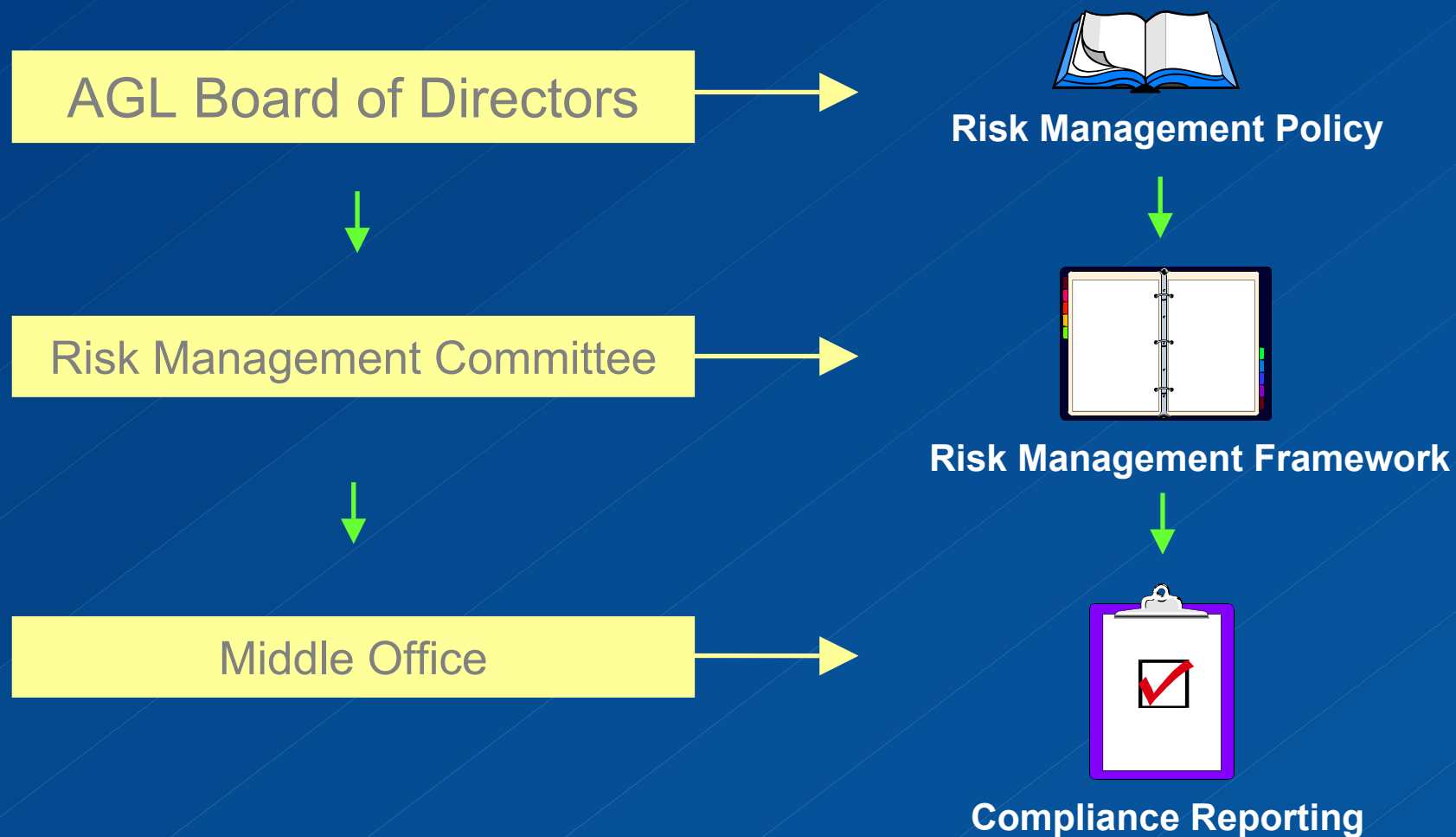
Market characterised by:

- Retailers purchase “physical” from the NEM
- Risk managed through financial derivatives and/or generation ownership
- Regional pricing, limited physical inter-connection, VoLL at \$10,000/MWh
- Commodity cannot be stored
- Customer load flex + generator availability has significant impact on the system
- Risk profile: demand/supply --> little impact on sales --> large impact on spot



Market characterised by:

- Primarily physical
- Long term gas supply and haulage agreements
- Lower relevance of spot prices
- Commodity can be stored
- Customer load flex has little impact on the system
- Risk profile: physical supply/haulage failure --> impacts sales





- Most recent review Q2 2004
- Findings:
 - on a par with leading energy companies
 - best practice standard of documentation
 - sound risk culture
 - conservative
- All recommendations addressed



W'sale Energy hedges retail load

→ Not spec. trading

W'sale Energy supports Sales & Mktg

→ Not Profit Centre

Low number of transactions

High transparency of activity

All transactions easily understood by Middle Office



Effective risk management structure and culture

RMC

Risk Management Committee (RMC)

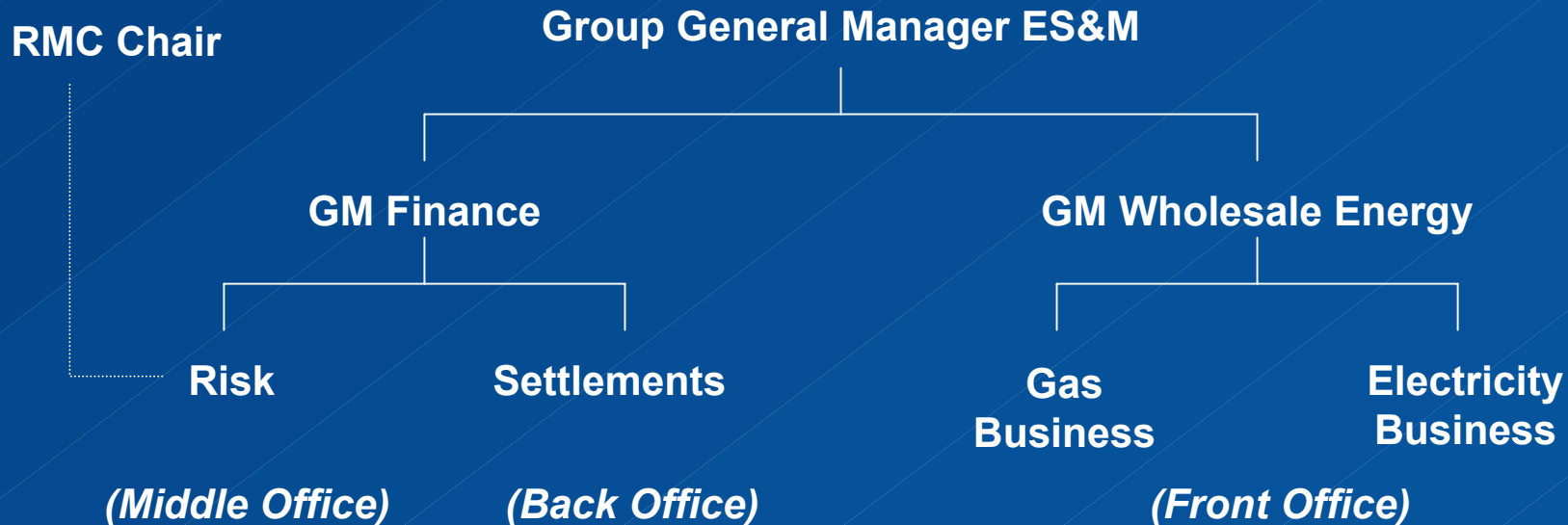
**Core: 3 Corporate executives
 4 ES&M executives**

RMC

Risk Management Committee (RMC)

Core: 3 corporate executives
4 ES&M executives

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AGL Board / Risk Management Committee

Trading

- Commodities
- Instruments
- Counterparty Credit Limits
- Transactions, Quantities & Maturities

(Front Office)

Risk

- ISDA Master Contracts
- Contract Confirmations
- Trading Mandates

(Middle Office)

Settlements

- Physical Purchases
- Derivatives

(Back Office)

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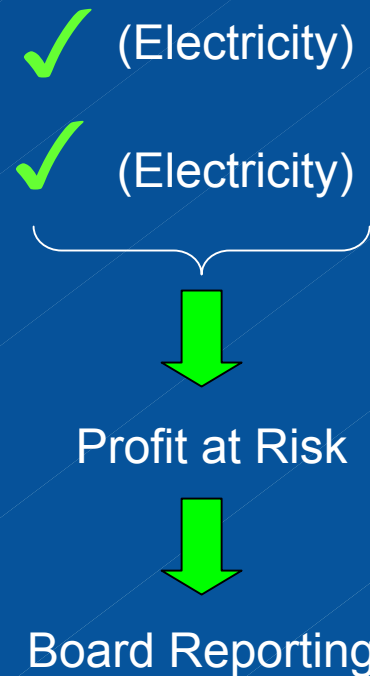


Risk Type

Managed Under the Policy / Framework

Set Risk Limits

- Market (Price & volume)
- Credit
- Legal / Contract
- Operational
- Regulatory



PaR is a measure of the future EBIT (compared to a base case) that AGL could lose due to adverse electricity market movements and credit defaults.

$$\text{PaR} = \text{Electricity Market PaR} + \text{Electricity Credit PaR}$$

PaR limit set by AGL Board in support of corporate strategy of reserving agreed % of profit for distribution to shareholders.

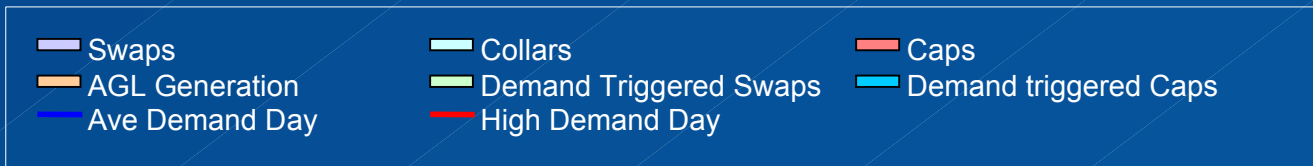
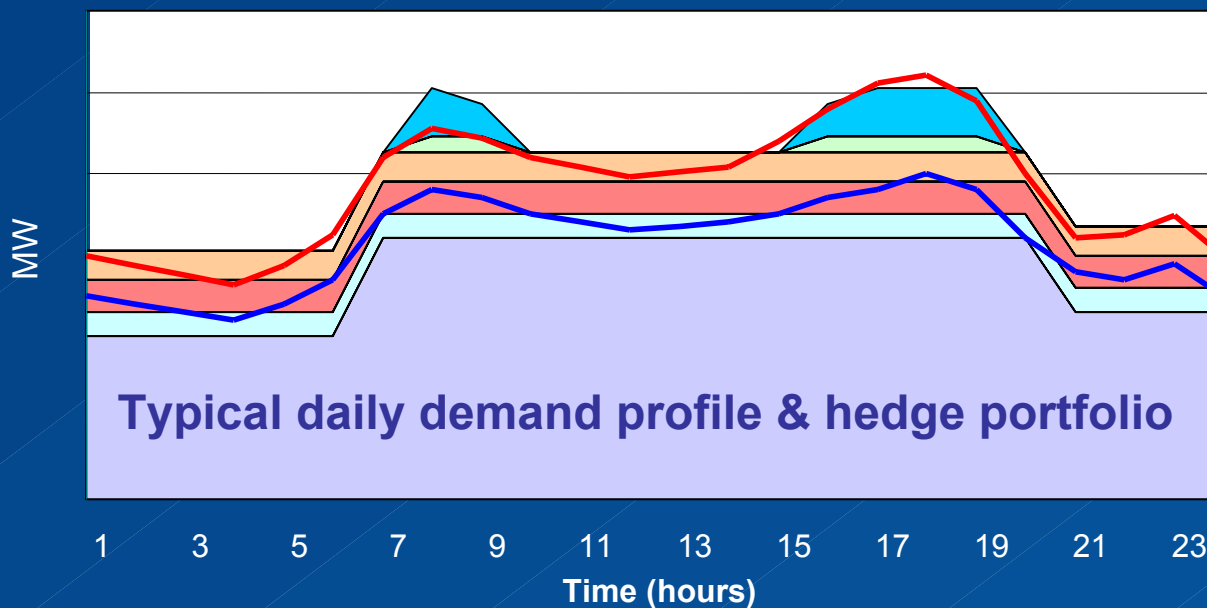
1. ELECTRICITY MARKET PaR



... measures risk from over/under hedged positions

+/- demand

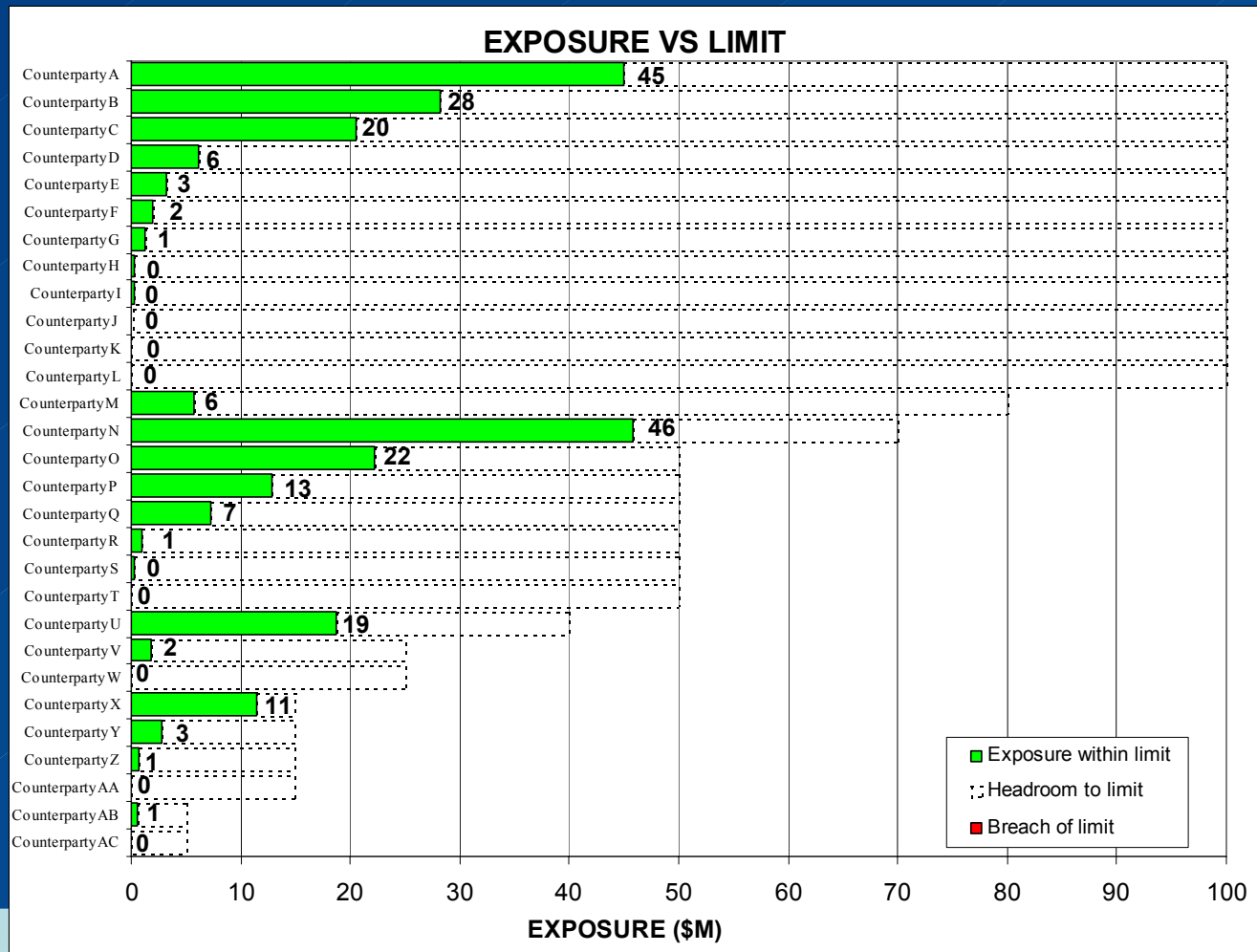
+/- price



2. ELECTRICITY CREDIT PaR

... measures risk from hedge counterparties

exposure (MtM + Buffer) x credit worthiness



- Majority of market risk managed within gas supply agreements:
 - Diversity of supply and haulage
 - Annual volumetric flexibility
 - Daily volumetric flexibility up to a maximum demand
 - Market price resets

- Residual risk managed by:
 - Underground storage capacity
 - LNG
 - Linepack

- AGL must implement IAS39 standard by July 2005:
 - IAS39 requires derivatives to be represented on balance sheet even if they are used exclusively for hedging purposes
 - Has the potential to create P&L volatility
- AGL is working with other industry participants to achieve an Australian common and appropriate interpretation of IAS39.
- AGL proposes to continue hedging for economic optimisation not for accounting outcomes.

We believe the Wholesale Energy Risk Mgmt system is:

- ✓ Appropriate for our business
- ✓ Industry best practice
- ✓ Integrated into the business via:
 - a strong risk culture
 - a strong governance structure

A photograph of two young boys playing on a beach. The boy on the left is smiling and has his arms raised. The boy on the right is looking down and has his arms raised. The background is a bright, sandy beach with waves in the distance.

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