



## Long Run Marginal Cost

25 January 2007



## Context

- IPART has critical decisions to make in relation to the energy purchase cost allowance (EPCA)
- These difficult decisions by IPART about complex issues will affect:
  - The future viability of the businesses
  - The level of competition in NSW
  - The level of new generation in NSW
- Therefore significant implications for IPART and the businesses in getting the EPCA right
- IPART's framework needs to compensate for the risks associated with getting the EPCA wrong
- Competition will ensure prices above cost reflective levels will not be sustained

## Long Run Marginal Cost

- Useful starting point, but hedging costs must be considered
- Contract market, not the LRMC, is the relevant market for determining the EPCA
- LRMC sensitive to input cost assumptions
- ACIL Tasman assumptions estimated for NEMMCO were used by Frontier and modified in some cases
- Integral has sought advice from ACIL Tasman to test reasonableness of Frontier's assumptions
- Initial indications are there would be an increase in Frontier's estimates of LRMC as a result



## Energy Purchase Costs

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## Energy Purchase Costs

- Frontier has provided three estimates of energy purchase cost allowances for Integral Energy, with estimates in all cases falling by 2009/10

	2007/08 \$/MWh	2008/09 \$/MWh	2009/10 \$/MWh
Frontier LRMC	45.7	46.1	45.3
Frontier “conservative”	55.0 – 57.7	51.1 – 56.7	49.6 – 54.8
Frontier “elbow” point	50.7 – 54.6	49.4 – 53.7	46.8 – 51.6



## Energy Purchase Costs

- Integral has calculated the energy purchase cost allowances it requires to ensure “cost reflectivity”
- We have used three methods to “market test” cost for regulated load
- Based on this analysis, we believe Frontier has not adequately considered the costs of hedging the Integral load, including:
  - Costs related to “shape” and volatility” of our load
  - Costs of extreme events
  - Intertemporal issues



## Energy Purchase Costs

- In each method, our required costs are above Frontier's:
  - Integral would be exposed to a shortfall of \$31m to \$163m over 3 years if cost reflectivity is not achieved
- Comparisons to “real life” Australian benchmarks show all are significantly above Frontier's estimates:
  - ESCV: \$59 - \$60/MWh
  - ESCOSA: \$73 - \$78/MWh
  - Likely that this contributes to greater competition in these States



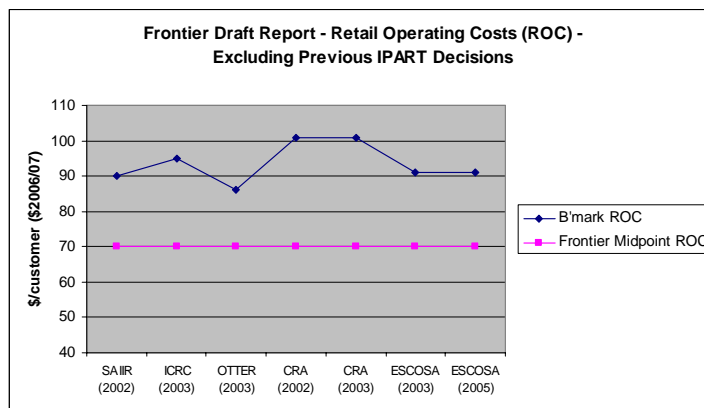
## Retail Operating Costs

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## Retail Operating Costs

- Frontier assumes real operating costs per customer will not rise
- Underlying real operating costs have risen and will continue to rise, suggesting Frontier's future allowances based on average last 4 years not appropriate
- Real increases in operating cost/customer are consistent with Ofgem's view that an increase in retail competition will increase retail costs
- Frontier's recommended range of \$60 - \$80 per customer for operating costs is below Integral's costs and other Australian and international benchmarks (even for starting point)

## Retail Operating Costs – Australian Benchmarks



## Retail Operating Costs – UK Benchmarks

- Frontier justify the reasonableness of their estimates by examining 1997/98 data from the UK (Ofgem)
- However:
  - More recent Ofgem data exists
  - Ofgem itself has rejected the use of pre-2000 data as a benchmark for post-contestability costs
- More recent Ofgem data (confirmed with Ofgem) suggests operating costs of \$120 per customer
  - An 80% increase on 1997/98 figures reported by Frontier
- UK data supports a level of operating costs per customer well above Frontier's estimates

## Retail Operating Costs – Summary

Item	\$ 2006/07 Per customer per annum
2004 UK (Ofgem) benchmark	\$120
Australian regulatory benchmark average	\$94
Frontier mid-point	\$70





## Retail Margin

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## Retail Margin

- Integral has concerns over aspects of Frontier's approach to assessing the retail margin, in particular:
  - How energy purchase risks are captured
  - Frontier's expected returns methodology



## Retail Margin - Energy Purchase Risks

- It is not obvious how Frontier captures energy purchase risks in their framework:
  - The linkage between energy costs and margin is not clear
  - The different risks inherent in the LRMC, “elbow” point or “conservative” energy cost allowances do not appear to be reflected in different margins
- Based on Integral’s expected load, a \$1 difference in energy costs results in a shortfall of approximately \$14m over the 3 year period



## Retail Margin - Expected Returns

- The Frontier/SFG expected returns approach is based on holding cash flows (rather than assets) constant
- This produces results that appear counter-intuitive for a regulated business:
  - A higher WACC should not result in a lower margin!
- This approach results in Frontier’s customer valuations being 3 times the assumed level of capital invested, which does not appear reasonable
- In addition, Frontier’s customer retention assumptions would need to be revised if competition were to increase as an outcome of this review





## Retail Margin - Summary

- As highlighted earlier:
  - There is a risk to Integral Energy if IPART set the EPCA too low, which is reflected in a shortfall in Integral Energy's returns
  - The margin set by IPART will need to adequately compensate Integral Energy for this risk
- These difficult decisions by IPART about complex issues will affect:
  - The future viability of the businesses
  - The level of competition in NSW
  - The level of new generation in NSW