AEMC workshop on differences between actual and forecast demand in network regulation

A consumer perspective on demand forecast accuracy

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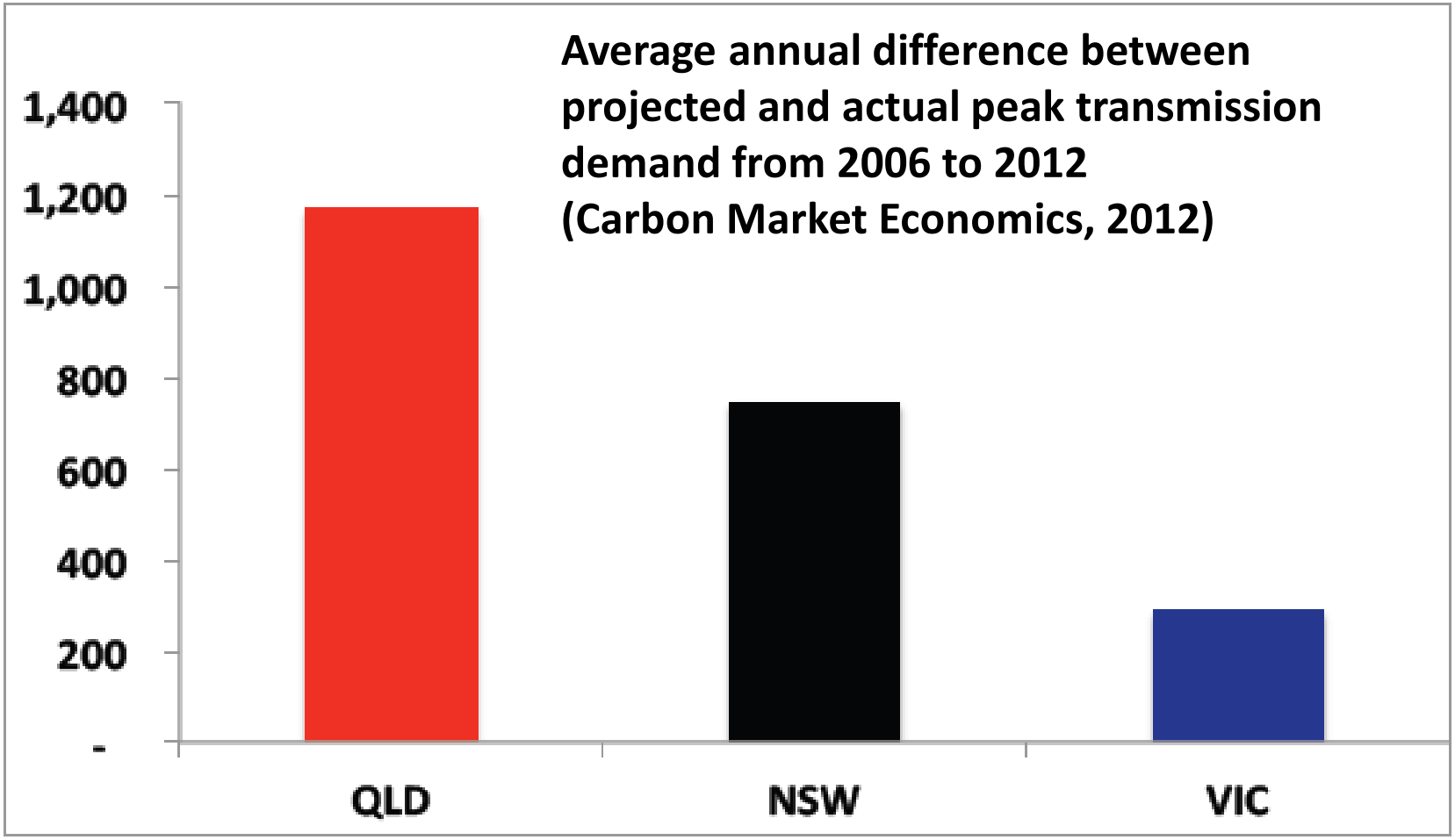
Network incentives and forecasting

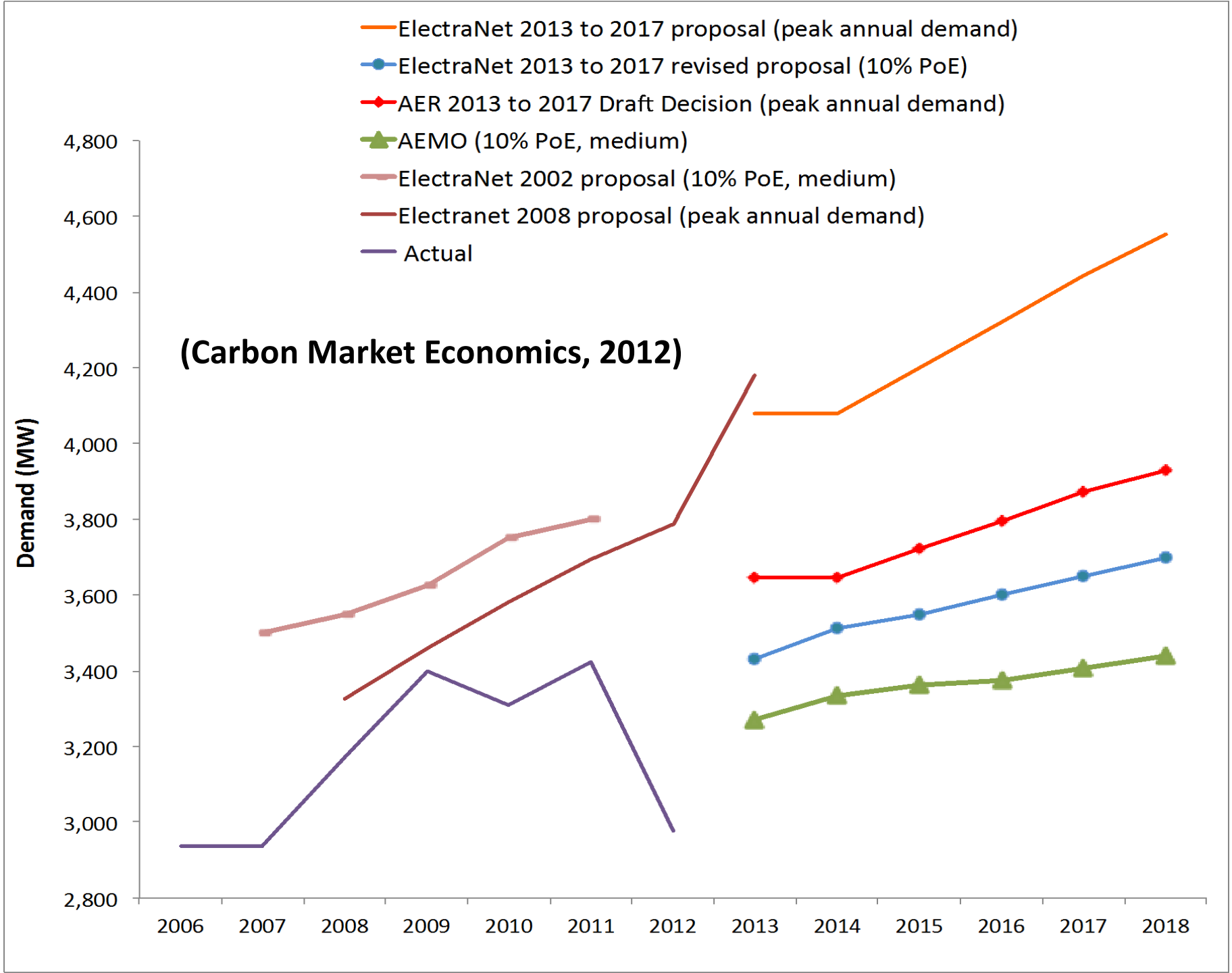
Network businesses regulated under a Weighted Average Price Cap have a strong incentive to

- Overestimate forecast peak demand, causing excessive investment at consumers' expense
- Underestimate forecast average demand, leading to over recovery of costs, again at consumers' expense

Revenue capped NSPs also have some incentive to overestimate forecast peak demand.

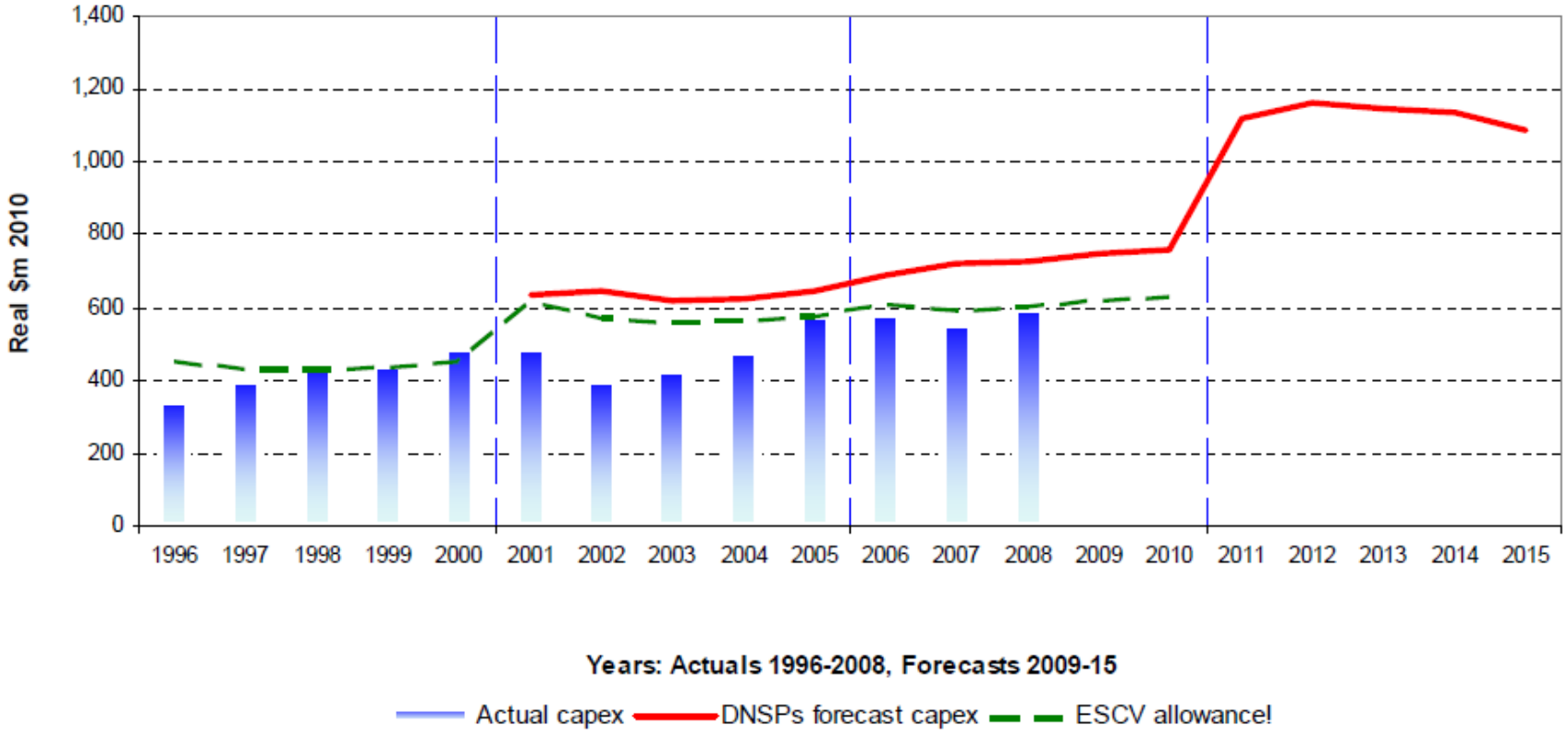
NSPs do systematically overestimate their forecast peak demand




ElectraNet 2013 to 2017 proposal (peak annual demand)
ElectraNet 2013 to 2017 revised proposal (10% PoE)
AER 2013 to 2017 Draft Decision (peak annual demand)
AEMO (10% PoE, medium)
ElectraNet 2002 proposal (10% PoE, medium)
Electranet 2008 proposal (peak annual demand)
Actual
(Carbon Market Economics, 2012)
Demand (MW)
4,800
4,600
4,400
4,200
4,000
3,800
3,600
3,400
3,200
3,000
2,800
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018

Overestimated peak demand is linked to excessive costs for consumers

Historical and forecast Capex for Victorian DNSPs (AER, 2010)



"...if we were to reduce current [2011-2015] forecasts by the proportion that [Victorian] DNSPs inaccurately forecasted in 2001-2007, it would reduce current forecast capex by 11.12%, or $648m, and opex by 26.75% or $850m..."

- *Consumer Action Law Centre, 2010*

NSPs usually underestimate forecast average demand

"While the AER rigorously tests the forecasts proposed by the DNSPs, actual data for DNSPs with WAPCs ... show actual sales volumes often, and perhaps consistently, exceed forecasts."

-Australian Energy Regulator, 2012

Is the risk of demand forecasts shared fairly between consumers and NSPs?

- Consumers effectively pay NSPs a considerable premium to carry expenditure and volume risk related to forecasting of demand, yet
- we see little evidence of the downside impacts on NSPs that would be expected (from time to time) if this risk was based on accurate forecasts.

Is the risk of demand forecasts shared fairly between consumers and NSPs?

- Consumers are not realising the benefits of improved cost efficiency arising from sustained reductions in demand.
- In ATA's view, it is consistent with the NEO for networks to be held more accountable for the accuracy of their forecasts.
- To this end, we feel assessment of previously approved Capex by the AER is appropriate.

Further considerations (if time permits)

- Relationship between forecast peak demand and viability of non-network solutions such as demand response
- Impact of forecasting accuracy on RIT-Ds and RIT-Ts (not just revenue determinations)
- Many consumers have capacity for higher risk of occasional reliability impacts

Is historical actual and forecast data relevant to future determinations?

Historical and forecast Opex for Victorian DNSPs (AER, 2010)