

### AEMC Workshop on Actual and Forecast Demand

Rainer Korte Chairman, Regulatory Managers Group

**28 February 2013** 













#### **SCER** request for advice

- What are the implications of differences between actual and forecast demand within the incentive based regulatory framework?
- Should the AER take these differences into account in making network determinations?
- Are changes to the Rules required to ensure customers receive the benefits of sustained reductions in demand?
- SCER has requested that any proposed actions be proportionate and not compromise the ability of the regulatory frameworks to deliver the NEO and meet the revenue and pricing principles



#### Summary of key messages

- SCER has raised a valid issue but it is one of incentive design that has largely already been addressed
- Recent Rule changes strengthen the role of the AER in incentive design
- The right response is to let the AER get on with the job
- Ofgem in the UK has also considered this issue and the outcomes are available for the AER to take into account as it considers improvements to incentive design
- Incentive regulation becomes ineffective when there are retrospective changes to incentives – for example applying ex-post adjustments that were not part of the incentive regime at the start of the regulatory period



#### Summary of key messages (cont.)

- Actual demand may be higher or lower than forecast consequences of underinvestment when demand grows faster than expected can be worse than premature investment
- Improved demand forecasting will reduce future risk of mismatch between forecast and actual spending needs – AEMO expanded role
- Also need to consider how transmission costs change as demand changes – how material is the issue?
- Under current arrangements any over or under investment compared to forecast will only result in additional or insufficient revenue for a maximum of 4 years – actual capex is reflected in the RAB at the next revenue reset



## Regulatory framework already addresses challenges

- Under the current incentive regime there is already an incentive to defer capex when demand outcomes are less than forecast (includes use of non-network solutions)
- Further the AER is tasked under the new Rules with refining incentives for TNSPs to spend as little as is required to meet service obligations
  - AER has substantial flexibility which extends to minimising windfall gains or losses associated with changes in demand
  - Grid Australia has outlined in previous submissions how such a mechanism could be structured for transmission
  - Contingent project mechanism is also available to mitigate risk associated with uncertainty in demand forecasts



### Regulatory framework already addresses challenges (cont.)

- Agree that the RIT-T provides a further administrative check against investing too early – AEMO also has a role in reviewing application of the test
- AEMO's expanded role to provide independent demand forecasts and to coordinate a consistent approach to forecasting at a localised connection point level (i.e. more relevant to investment decisions) is expected to reduce the mismatch between forecast and actual demand
- Reliability standards are being reviewed to ensure that obligations include only appropriate investment
  - Includes ensuring changes in demand forecast translate into changes in the timing of projects required to meet an obligation where applicable



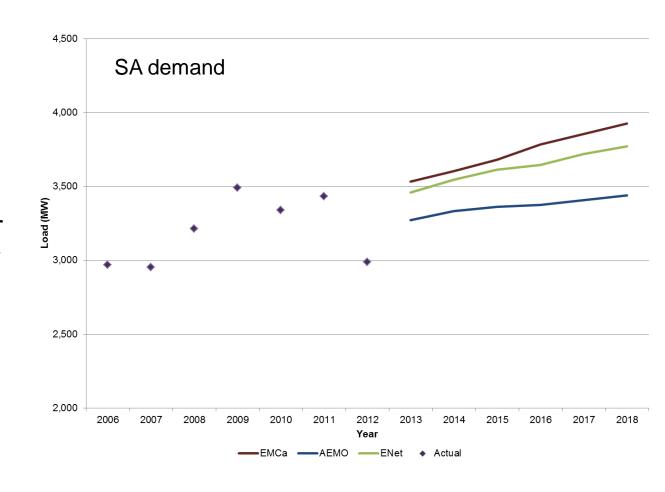
## How transmission costs change as demand changes

- The vast majority of transmission costs are unaffected by the level of demand during a regulatory period
  - Changes in demand forecasts mean that some capital projects may be deferred or advanced in timing (usually only by a year or two)
  - But vast majority of costs factored into a revenue decision relate to past investment, asset renewals and operations and maintenance (only a very small fraction of the latter is related to demand)
- Capex is only a small driver of revenue in a regulatory period and demand driven capex is only a portion of this
- Revenue difference from variation in demand driven capex is relatively small



# How transmission costs change as demand changes - example

- ElectraNet
  adopted lower
  demand forecast
  (about 10%
  reduction)
- Decreased 5-year capex forecast by about \$150m (or about 20%)
- Revenue impact of this is about \$30m over 5 years (or 1-2%)



Source: ElectraNet revised Revenue Proposal, 16 Jan 2013



# How transmission costs change as demand changes (cont.)

- Future revenue is based on actual capex in current regulatory period; i.e. any variation is trued up at next revenue reset
- It cannot be assumed that if NSPs set "efficient prices" that revenues from consumers will rise and fall in line with costs
- The lumpiness of transmission investment means there is a very weak relationship between demand and cost in the short to medium term



# How do TNSPs respond to changes in demand (questions 1 and 2)

- TNSPs alter their spending as demand forecasts change and are never tied to what was approved at the previous regulatory review (capex is prioritised to meet needs within the regulatory period)
- The regulatory framework provides the AER with tools to provide the correct incentives in response to changes in demand and to manage risk associated with changes in demand
  - The AER should be allowed to get on with this



# Impact of control mechanism (question 3)

- The revenue cap is only one of the tools to manage demand risk
- A revenue cap in combination with a properly designed capex incentive scheme (including contingent projects where appropriate) and additional administrative measures (e.g. the RIT-T) is appropriate for transmission
- This is because the lumpiness of transmission investment means there is a weak and variable relationship between demand and cost over the short to medium term (at the aggregate level)



#### **Conclusion**

- What problem is actually being targeted?
- Are the existing features of the incentive based regulatory regime sufficiently clear to policy makers?
- The current regulatory framework makes adequate provision for the AER to address any perceived problem through effective incentive design
- The cost impact of any mismatch between actual and forecast demand does not appear to be a material issue
- Evidence of a Rule deficiency is lacking