

State of the market 2014

Australian Institute of Energy

Presented by –
Simon
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Date
22 September
2014

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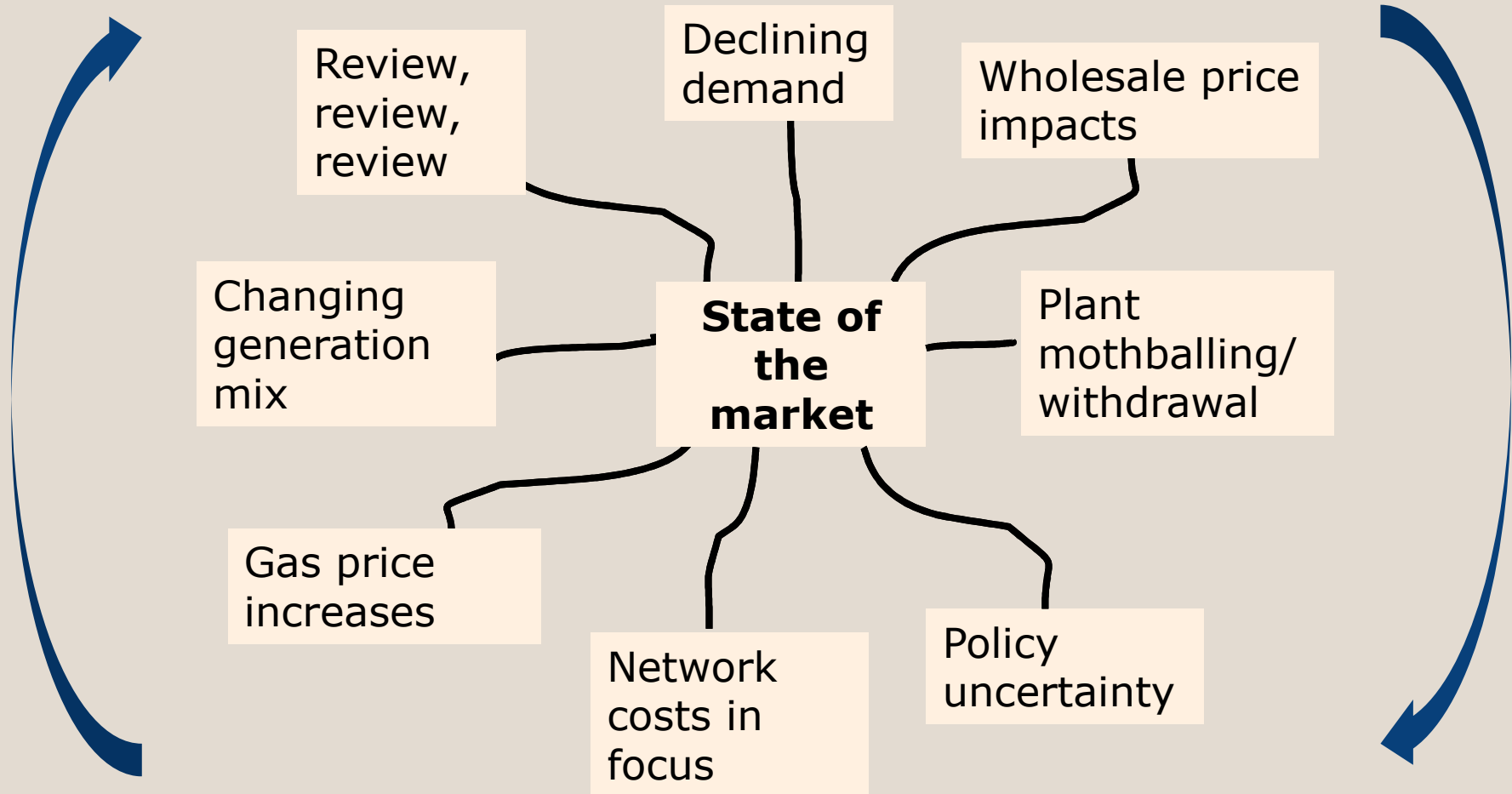
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- > AGL is one of Australia's leading renewable energy companies and is Australia's largest private owner, operator and developer of renewable generation assets.
- > AGL has major investments in thermal plant, hydro and wind, as well as ongoing developments in key renewable areas including solar, geothermal, biomass, bagasse and landfill gas.
- > AGL also operates retail, merchant energy and upstream gas businesses and has over 3.8 million customer accounts.

- > State of the market in 2014
- > Macquarie Generation acquisition
- > Current wholesale market policy issues
 - » Optional firm access

State of the market 2014

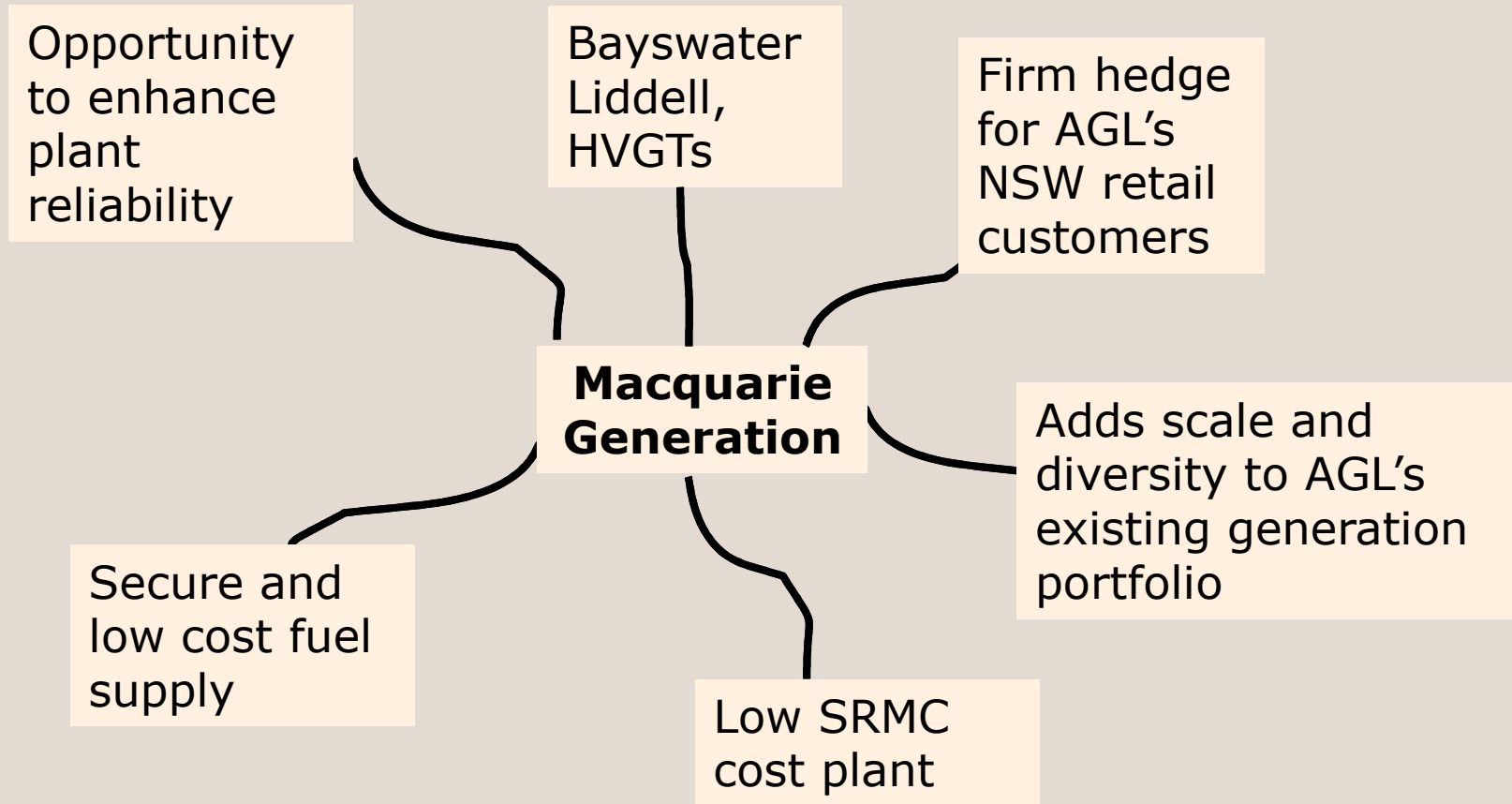
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Macquarie generation acquisition

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Wholesale policy reviews

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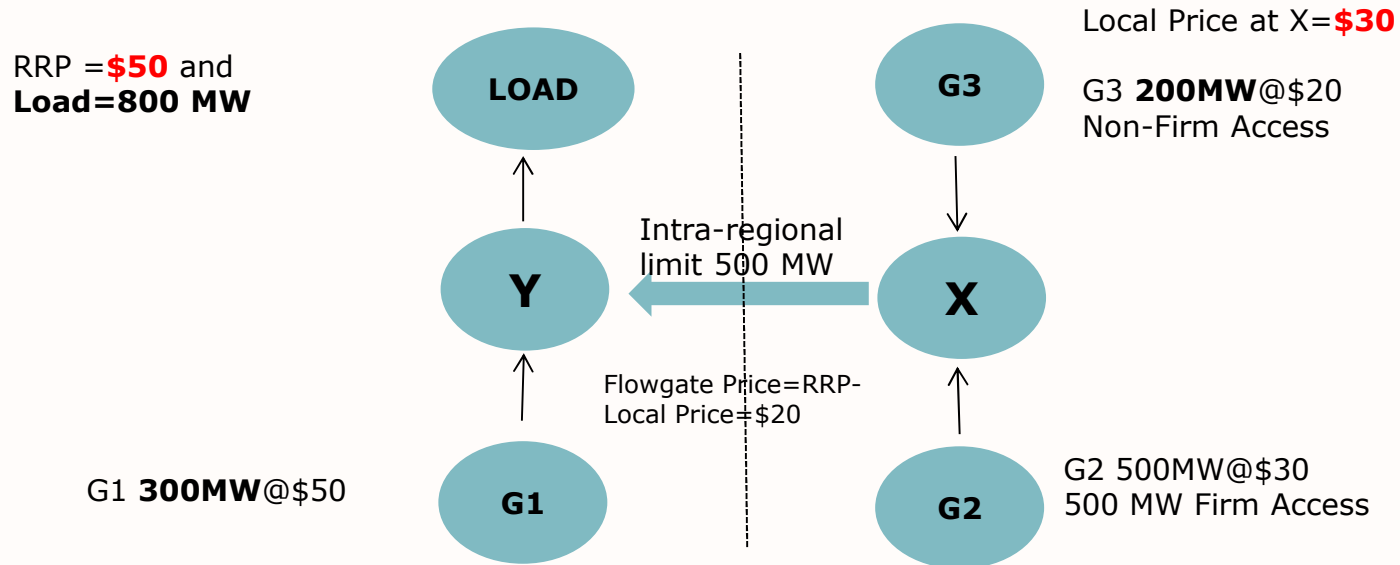
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- 1997 National Electricity Code Administrator – Transmission and Distribution Pricing Review
- 1999 ACCC – Application for code change authorisation (response to the NECA review)
- 2002 Towards a Truly National and Efficient Energy Market COAG 'Parer' Review – Transmission recommendations
- 2007 Energy Reform Implementation Group – Transmission
- 2010 - 13 AEMC Transmission Framework Review (TFR)
- 2012 Productivity Commission - Electricity Network Regulatory Frameworks – Benchmarking
- Present - AEMC/AEMO OFA assessment (1 year) and 3 years of implementation

- > Focus of the TFR is on better aligning investment signals in light of future energy circumstances.
- > Two key elements of the TFR:
 - » **Connections**
 - Revised connections arrangements to enhance competition
 - » **Optional Firm Access (OFA)**
 - Aimed at addressing disorderly bidding and congestion management (through network augmentation);
 - Aimed at providing a clear signal to new entrants to locate their generation and to pay for any necessary network expansion – deep connection;
 - Potentially increase pressures on TNSPs in terms of infrastructure investment/replacement and service delivery.

OFA example

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| Generator | Dispatch (MW) | Energy Settlement | FLG Entitlement (MW) | FLG Usage (MW) | Entitlement - Usage | Access Settlement (\$) | Total Revenue (\$) |
|-----------|---------------|-------------------|----------------------|----------------|---------------------|------------------------|--------------------|
| G1 | 300 | 15,000 | 0 | 0 | 0 | 0 | 15,000 |
| G2 | 300 | 15,000 | 500 | 300 | 200 | 200*20=4000 | 19,000 |
| G3 | 200 | 10,000 | 0 | 200 | -200 | -200*20 = -4000 | 6,000 |
| Total | 800 | 40,000 | 500 | 500 | 0 | 0 | 40,000 |

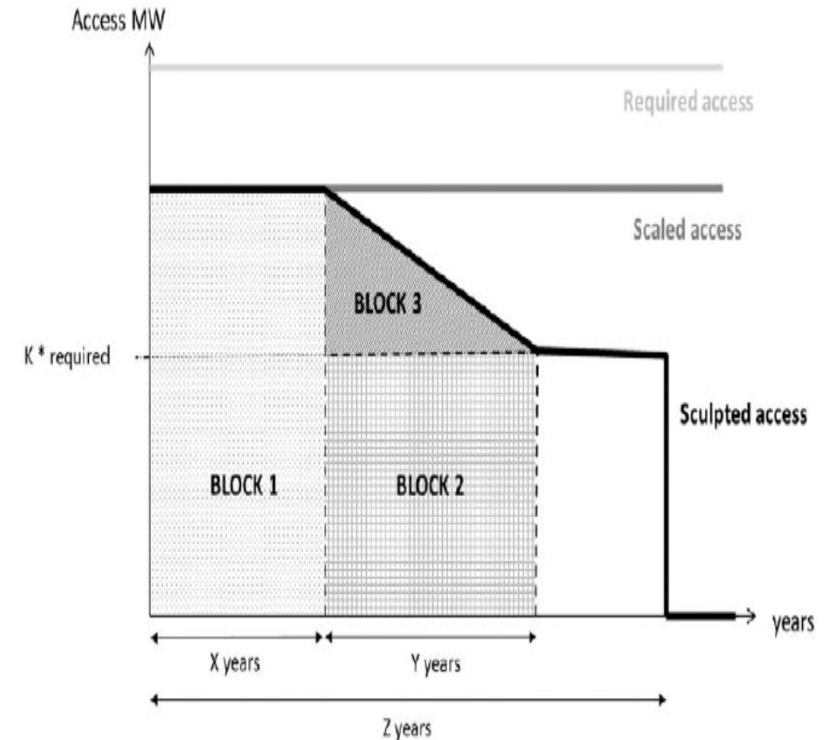
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- > What are the incentives created for different forms of generation capacity?
 - » A baseload generator would likely purchase access equivalent to the output of its asset – taking into account its availability/capacity factor.
 - » A peaking generator faces greater difficulty in purchasing firm access rights – as it is not confident when, and if, its capacity will be required.
 - Peaking generators may risk exposure to the network and the possibility of compensating a firm access generator.
 - » A renewable energy generator faces a greater conundrum due to its intermittency and faces the prospect of purchasing access to the network which it may not consistently use – or risk paying a firm access generator in the event that their output constrains them.
 - The impacts of either approach will only become clear over time.

- > Delivering on the objectives of the OFA is important – but ultimately may not be achievable
 - » Disorderly bidding – benefits of OFA are unclear/AEMO results;
 - » Participants costs may be high – implementation i.e. systems costs and hedging (hedging at both the nodal and reference price);
 - » OFA would provide strong locational signals to new entrants and this may be a positive as it may reduce network costs.
 - Raises questions – do locational signals matter in an oversupplied market? What of the impacts of other restrictions i.e. 2km wind buffers?; and
 - » Existing pressures on TNSPs are unlikely to change – in fact there may be greater incentives on the part of TNSPs to invest in network infrastructure to maintain the firm access standards.
 - AEMC currently doing additional work on performance incentives to be levied on TNSPs as part of OFA settings.

- > The TFR proposed access be sculpted back over time, so that TA is reduced over a number of years
- > All power stations provided with a minimum $X+Y$ years of access:
 - » X would represent a learning period
 - » Y is the period needed to ensure a gradual transition
- > During Y , the initial TA allocation would be sculpted back to a lower level – K . Younger power stations could be provided with longer terms, Z years, where Z is a proxy for residual power station life and then expired.

Figure 9.1 Sculpting of transitional access for a power station



Source: AEMC

- > Transitional access proposal is proving contentious
 - » Concerns raised from potential new entrants that methodology provides free access to incumbents
 - » Concerns raised from incumbents that proposal removes historic access, provides an unnecessary locational signal
- > AEMC objective:
 - » To sufficiently protect existing investors without unnecessarily compensating them.

- > The key sticking points to the implementation of the OFA regime are:
 - » Will it actually lead to a better outcome? Will it address disorderly bidding? Does it provide any incentives to TNSPs?
 - » Is it needed? Market circumstances are changing significantly, locational investment signals are unnecessary when no new generation investment is forecast until 2022 – aside from RET (also uncertain).
 - » Will the issue of access transition be a sticking point – some argue for full grandfathering, others partial and yet others still - none whatsoever.

- 2nd Interim Report to be released November 2014 – inclusive of cost benefit analysis.
- If OFA is to proceed – draft rules would be published in the 3rd Interim Report in March 2015.
- Final recommendations to the COAG Energy Council in mid-2015.