

AGL ENERGY LIMITED

of 2014

RE: PROPOSED ACQUISITION OF MACQUARIE GENERATION (A CORPORATION ESTABLISHED UNDER THE ENERGY SERVICES CORPORATIONS ACT 1995 (NSW))

ANNEXURE CERTIFICATE

This is the annexure marked "**BAR 26**" annexed to the statement of **BRETT ALAN REDMAN** dated 23 March 2014

Annexure BAR26

Filed on behalf of (name & role of party)	<u>AGL Energy Limited</u>		
Prepared by (name of person/lawyer)	<u>Liza Carver</u>		
Law firm (if applicable)	<u>Ashurst Australia</u>		
Tel	<u>+61 2 9258 5897</u>	Fax	<u>+61 2 9258 6999</u>
Email	<u>Liza.Carver@ashurst.com</u>		
Address for service (include state and postcode)	<u>Level 35, 225 George Street, Sydney, NSW, 2000</u> <u>DX 388 Sydney</u>		

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Statement of Issues

6 February 2014

AGL Energy Limited – proposed acquisition of the business and assets of Macquarie Generation

Introduction

1. Outlined below is the Statement of Issues released by the Australian Competition and Consumer Commission (**ACCC**) on the proposed acquisition of the business and assets of Macquarie Generation by AGL Energy Limited (**AGL**) (**proposed acquisition**).
2. A Statement of Issues published by the ACCC is not a final decision about a proposed acquisition, but provides the ACCC's preliminary views, drawing attention to particular issues of varying degrees of competition concern, as well as identifying the lines of further inquiry that the ACCC wishes to undertake.
3. The ACCC's review of the proposed acquisition is ongoing. The ACCC has not formed a final view on whether the proposed acquisition is likely to have the effect of substantially lessening competition in a market in contravention of section 50 of the *Competition and Consumer Act 2010* (the **Act**).
4. In line with the ACCC's Informal Merger Review Process Guidelines (at www.accc.gov.au/processguidelines) the ACCC has established a secondary timeline for further consideration of the issues. The ACCC anticipates completing further market inquiries by 17 February 2014 and anticipates making a final decision on 4 March 2014. However, the anticipated timeline can change in line with the Merger Review Process Guidelines. To keep abreast of possible changes in relation to timing and to find relevant documents, market participants should visit the Mergers Register on the ACCC's website at www.accc.gov.au/mergersregister.
5. A Statement of Issues provides an opportunity for all interested parties (including customers, competitors, shareholders and other stakeholders) to ascertain and consider the primary issues identified by the ACCC. It is also intended to provide the merger parties and other interested parties with the basis for making further submissions.

Background

6. Macquarie Generation is being offered for sale as part of the broader privatisation of New South Wales (**NSW**) electricity generation assets being undertaken by the NSW Government.¹ AGL has submitted an indicative bid for Macquarie Generation and has been invited by the NSW Government to submit a binding bid.

The parties

AGL Energy Limited

7. AGL is an energy company listed on the Australian Securities Exchange. It has a range of retail and wholesale electricity interests in the National Electricity Market (**NEM**).² AGL does not have any generation assets in NSW; however, it has significant generation assets in Victoria (Loy Yang A power station and several hydro-electric power stations) and South Australia (Torrens Island power station).
8. AGL is also one of the three major energy retailers (together with Origin and EnergyAustralia), having a significant retail electricity customer base in each region of the NEM (except for Tasmania). AGL has approximately 16 per cent of retail electricity load in NSW in total (including both small and large customers), and approximately 24 per cent of electricity retail customer load associated with residential and small business electricity ('mass market') customers in NSW.

Macquarie Generation

9. Macquarie Generation is a NSW state-owned corporation. The key assets of Macquarie Generation are the Bayswater and Liddell power stations together with the relevant associated wholesale risk management portfolio and major contracts (including a long term hedge arrangement with the Tomago aluminium smelter).
10. Bayswater and Liddell are black coal generation plant with summer 2013-14 registered capacities of 2,720MW and 2,020MW, respectively. Bayswater is the second largest power station and Liddell is the fourth largest power station in Australia. Macquarie Generation accounts for 27 per cent of NSW's electricity generation capacity and is the largest generator in the NEM.

Other market participants in NSW

Origin Energy

11. Origin Energy has a portfolio of generation assets which comprises 26 per cent of generation capacity in NSW, including the Eraring, Shoalhaven and Uranquinty power stations. Origin Energy has approximately 38 per cent of electricity retail customer load in NSW (both in total and for retail electricity load associated with mass market customers).

¹ A further sale process for the assets of Delta Electricity (including the Vales Point and Colongra power plants) has recently commenced.

² The NEM is the wholesale spot market through which generators and retailers trade electricity. See the 'Industry Dynamics' section below for further information regarding the NEM.

EnergyAustralia

12. EnergyAustralia (formerly TRUenergy) has a portfolio of generation assets which comprise 17 per cent of generation capacity in NSW, including the Mount Piper, Wallerawang and Tallawarra power stations in NSW. EnergyAustralia has approximately 33 per cent of electricity retail customer load in NSW (both in total and for retail electricity load associated with mass market customers).

'Second tier' retailers

13. Other small ('second tier') electricity retailers in NSW hold small individual retail shares and collectively have a share of approximately 15 per cent of electricity retail customer load in NSW (in total), but only 5 per cent of retail electricity load associated with mass market customers in NSW.
14. The vast majority of second tier retailers are not vertically-integrated in NSW, although some of these retailers have generation assets in other regions of the NEM. For the remainder of this document, 'independent retailers' refers to second tier retailers that are not vertically-integrated in NSW.

Other generators

15. Snowy Hydro and Delta Electricity own and operate the remaining significant generation assets in NSW in competition with Origin Energy, EnergyAustralia and Macquarie Generation. Snowy Hydro and Delta Electricity have a 14 per cent and 11 per cent share of generation capacity in NSW respectively.

Market inquiries

16. On 2 December 2013 the ACCC commenced market inquiries regarding the proposed acquisition. A range of interested parties provided responses, including generators and retailers, energy users and other interested parties.
17. The ACCC is also considering information available to the Australian Energy Regulator (**AER**) in its assessment of the proposed acquisition.

Future with and without the acquisition

18. Section 50 of the Act prohibits mergers or acquisitions that would have the effect or be likely to have the effect of substantially lessening competition in a market. In assessing a proposed acquisition pursuant to section 50 of the Act, the ACCC considers the effects of the acquisition by comparing the likely future competitive environment post-acquisition if the acquisition proceeds (the "with" position) to the likely future competitive environment if the acquisition does not proceed (the "without" position) to determine whether the proposed acquisition is likely to substantially lessen competition in any relevant market.
19. The ACCC understands that there are multiple bidders seeking to acquire Macquarie Generation. There are therefore a number of possible future competitive environments in the absence of the proposed acquisition which the ACCC is exploring in relation to its assessment of the proposed acquisition. These include:
 - A rival bidder acquiring the assets of Macquarie Generation;
 - The status quo (where the assets of Macquarie Generation remain under NSW Government ownership as no bid is received above the reserve price).

20. If AGL did not acquire Macquarie Generation, then it is likely to remain a stand-alone generator or alternatively be owned by an operator with much less significant vertical integration. This is likely to have implications for competition in the relevant retail and wholesale markets.
21. The ACCC recently reviewed ERM Power's proposal to bid to acquire Macquarie Generation. On 30 January 2014, the ACCC announced its decision not to oppose ERM Power's proposed acquisition.
22. The ACCC is continuing to assess the information available to it regarding the likely future competitive environment without the proposed acquisition.

Areas of overlap and market definition

23. The ACCC considers that the key areas of overlap between AGL and Macquarie Generation are in the supply of wholesale electricity and financial (hedge) contracts.
24. While Macquarie Generation does not overlap with AGL in electricity retailing, the ACCC considers that electricity retailing is relevant to the ACCC's assessment of the competitive impact of the proposed acquisition in light of the vertical integration that would occur and the potential impact on competing retailers.

Wholesale supply of electricity / supply of hedge contracts

Product dimension

25. Consistent with previous reviews, the ACCC considers that the wholesale supply of electricity and the supply of financial (hedge) contracts are appropriately defined as separate product markets. However, the ACCC recognises the close connection between hedge contracts and wholesale electricity markets, with hedge contracts being an essential input to sustainably participating in wholesale and retail electricity markets on a material scale.

Geographic dimension (wholesale supply of electricity)

26. The ACCC's preliminary view is that either or both a NSW or a combined NSW/Victoria/South Australia market may be relevant for the purposes of defining the geographic dimension for the wholesale supply of electricity.
27. There are constraints and degrees of substitution between jurisdictions of the NEM that arise from interconnectors between the regions. Electricity imports typically act as a very limited constraint at times of high demand (and hence high prices) when interconnectors between regions bind (preventing further imports into the adjoining region), but will provide a more effective constraint at other times of lower demand. This makes it relevant to consider both a narrow and a broader market. Regardless of the geographic dimension considered, the ACCC takes into account flows of electricity via regional interconnectors in its assessment.

Geographic dimension (supply of hedge contracts)

28. In relation to the supply of hedge contracts, the ACCC considers that the relevant geographic dimension to consider is the NSW region of the NEM, having regard to the fact that payments under hedge contracts are based on differences between the strike price and the regional reference price in a particular region of the NEM.

29. The ACCC understands that a retailer seeking to manage price risk associated with its customer load in one region of the NEM will very rarely (if ever) enter into a hedge contract under which payments are calculated by reference to the spot price in a different region of the NEM, since this is not an effective way to manage the risk of price divergences between regions of the NEM. This primarily reflects the fact that at times of high demand in a NEM region (and hence a high regional reference price), there is often a significant divergence from the spot price in other NEM regions. Purchasing inter-regional settlement residues³ is not typically viewed as an effective tool to facilitate inter-regional hedging given flows on interconnectors can be limited (i.e. they do not facilitate entering into hedge contracts under which payments are calculated by reference to a spot price in a different region of the NEM). This is especially the view of market participants with operations on only one side of adjoining regions of the NEM.

Retail supply of electricity

Product dimension

30. The retail supply of electricity can be broadly categorised by customer type as follows:
- Residential and small business customers (**mass market customers**) who typically consume up to 160MWh of electricity per annum; and
 - Industrial and commercial customers (**large business customers**) who typically consumer in excess of 160MWh of electricity per annum.
31. The ACCC understands that the requirements of these categories of customers differ significantly, in particular given the differing nature of the customer-retailer relationship and the types of risk management required by retailers to service each category of customer. Those differences mean that some retailers focus on only one customer type.

Geographic dimension

32. The ACCC's preliminary view is that the precise scope of the geographic dimension of the market for the retail supply of electricity is unlikely to be a determinative issue in assessing the proposed acquisition. Either or both a NSW market or a broader NEM-wide market may be relevant.
33. The ACCC recognises that many electricity retailers operate across more than one NEM region. However, it is necessary for a retailer to secure a number of inputs specific to each region (e.g. a retail licence⁴ and hedge contracts referenced to the regional reference price in that region). Therefore, a retailer of electricity in one region cannot switch its operations quickly and without reasonably significant investment to another region.

³ Generators and retailers may participate in AEMO auctions for "inter-regional settlement residues" (IRSR). These residues arise because there is a surplus to AEMO when selling electricity across an interconnector and there is a difference between the regional reference prices on either side of the interconnector. Settlement Residue Auctions (SRAs) allow market participants to bid for entitlements to a proportion of the total IRSR, which to some extent can mitigate the effects of price divergences between the regions of the NEM.

⁴ Although as more jurisdictions implement the National Energy Retail Law, there is a movement towards national licensing.

Conclusion

34. The ACCC considers that the relevant markets in which to assess the proposed acquisition are separate but related markets for:
- the wholesale supply of electricity in NSW, taking into account interconnector flows and/or a broader geographic market taking into account AGL's generation assets in Victoria and South Australia;
 - the supply of financial (hedge) contracts under which payment is based on the regional reference price in NSW; and
 - the retail supply of electricity in NSW (and/or a broader geographic market taking into account AGL's retail presence across the NEM).
35. The ACCC considers that the proposed acquisition also raises issues with respect to the wholesale supply of electricity more broadly in the NEM and therefore considers it is also relevant to consider the impact of the proposed acquisition on a NEM-wide basis.

The ACCC invites comments from market participants on its proposed definition of the relevant markets for assessing whether the proposed acquisition is likely to substantially lessen competition.

Industry Dynamics

The wholesale electricity industry of eastern and southern Australia

36. There are approximately 200 electricity generators (of significance) of varying sizes operating in the NEM (excluding smaller imbedded generation). Generators are commonly characterised in terms of their capacity (i.e. the maximum amount of electricity that may be produced at a given time, usually measured in megawatts (MW)).
37. Electricity retailers do not physically supply electricity to consumers. Rather, they pay for electricity consumed by their customers, including the transmission and distribution costs, and then bill their customers and provide them with related services.
38. The NEM is the wholesale spot market through which generators and retailers trade electricity and is operated by the Australian Energy Market Operator (AEMO). Retailers pay AEMO for electricity consumed by their customers and AEMO pays generators for electricity they supply. There are five regions of the NEM: Victoria, NSW, Queensland, South Australia, and Tasmania. These regions are physically linked by transmission lines (referred to as 'regional interconnectors'). NSW is a net importer of electricity. NSW imports around 7% of its needs from Queensland and 5% from Victoria.

Interconnectors and price separation between NEM regions

39. A spot price in each region of the NEM (referred to as the 'regional reference price') is determined for each half-hour period and is calculated based on the bid of the most expensive generator required ('dispatched') to meet regional demand. The spot price may vary between regions as a result of constraints experienced on interconnectors and transmission loss factors.
40. If the capacity of interconnectors is unconstrained, generators in each NEM region will compete with generators in other regions, and provide a competitive constraint on each other's bidding behaviour. However, if the interconnectors are

used at or near capacity, or the capacity of the interconnectors is reduced for technical reasons, supply between regions may be constrained and no additional electricity can be imported or exported into or out of a region. In this situation, prices will often diverge between regions, such that there is not a single NEM price and the extent to which conduct of market participants in one region provides a competitive constraint on the conduct of market participants in another region will be limited by the capacity of the relevant interconnector.

Risk management in the NEM

41. Wholesale spot prices are volatile, reflecting varying demand levels and the availability and costs of different types of generation. In each region of the NEM, pool prices for electricity in any half-hour period can range from a floor of -\$1000 per MWh to a cap of \$13,100 per MWh.
42. There is the potential for volatility in regions of the NEM to have a significant impact on the average wholesale price of electricity. If prices approach the market cap of \$13,100 per MWh for just three hours in a year, the average annual wholesale spot prices may rise by almost 10 per cent.
43. Retailers generally offer fixed electricity rates to their customers and are therefore exposed to the risk that the costs of purchasing wholesale electricity from the spot market will exceed the revenues they earn from their customers, described here as 'price risk'.
44. Generators also face a level of price risk, particularly since their financing and investment decisions may be based on projected spot prices which they anticipate will deliver an expected rate of return.
45. Generators and retailers seek to manage risk associated with the wholesale electricity spot price volatility by entering into financial derivative contracts. These contracts are commonly known as 'hedge contracts'. There are two main types of hedge contracts:
 - **Over-the-counter** hedge contracts (**OTCs**) where two parties (typically a generator and a retailer) enter into a bilateral contract (either directly between the counterparties or assisted by a broker). OTCs may be in standard form or tailored to the particular needs of the parties.
 - **Exchange traded** hedge contracts (**ETCs**), also known as electricity futures products, which are traded on the ASX.
46. In its simplest form, a hedge contract specifies an agreed 'strike price' and the counterparties will pay one another according to the difference between the spot price (i.e. the spot price in one region of the NEM) and the strike price at the contract's expiration date. The two most common types of hedge contracts are swaps and caps:
 - **Swaps:** a contract under which the generator must pay the retailer the difference between the spot price and the strike price during times that the spot price is higher than the strike price and the retailer will pay the difference to the generator for the reverse case. This means that a generator is effectively 'committed' to generate the contracted volume of electricity, unless it chooses to bear this spot price risk itself or enters into another swap to cover its liability.
 - **Caps:** a contract which – in relation to any electricity consumed by the retailers' customers at a time when the actual spot price exceeds the strike price – the generator will pay the difference to the retailer. The retailer will

AGL Energy Limited - proposed acquisition of Macquarie Generation

pay a premium to reflect the fact that the generator would be foregoing revenue that it would otherwise receive when the spot price exceeds the strike price.

47. As retailers generally have no choice as to the amount of electricity that they must purchase on the spot market on behalf of their customers, retailers are also exposed to the risk that their customers' use may exceed the volumes covered by hedge contracts, described here as 'volume risk'.
48. Trading of wholesale electricity derivatives (hedge contracts) extends beyond firms which own retail and/or generation businesses, and include participants who trade on a speculative basis, without any underlying physical exposure to the NEM pool price (such as ANZ, CBA, Macquarie Bank and Westpac).

Trend towards vertical integration

49. There has been a trend towards vertical integration of generators and retailers to form 'gentailer' structures throughout the past decade. The Australian Energy Regulator (**AER**) has recently observed that this trend has accelerated over the last five years, and is common to government-owned and privately owned businesses.
50. Vertical integration in recent years includes:
 - Origin and EnergyAustralia acquiring generation contracts and retail customers in NSW in 2010 and more recently the underlying generation assets in 2013
 - AGL acquiring South Australia's largest generator (Torrens Island) in 2007 and raising its equity stake in Victoria's Loy Yang A power station from 32.5 per cent to 100 per cent in 2012;
 - AGL and Origin acquiring retail customers in Queensland through privatisation in 2006-07; and
 - AGL, Origin and EnergyAustralia building new generators.
51. As previously noted by the AER⁵, across the NEM, three private businesses – AGL, Origin and EnergyAustralia – have significant market share in both generation and retail markets. These three major vertically integrated retailers have a combined share of 36 per cent in electricity generation capacity across the NEM and jointly supplied 77 per cent of mass market customers in the NEM in 2013 (the percentage is higher if Tasmanian and regional customers supplied by Ergon in Queensland are excluded due to lack of contestability). In addition, these three major vertically integrated retailers control around 45 per cent of new generation capacity commissioned or committed in the NEM since 2009. Investment by entities that do not also retail energy has been negligible, except for the case of wind generation.
52. Increasingly, generators and retailers are managing their price and volume risk by vertically integrating with the aim of balancing their generation capacity and retail customer demand. While vertical integration provides a means for "gentailers" to internally manage price volatility in the electricity spot market, it also results in a reduced requirement for vertically integrated gentailers to buy and sell hedge contracts to and from third parties. Vertical integration combines previously separated generators and retailers and results in these entities

⁵ AER, State of the Energy Market report 2013, section 5.2.1, p.123

withdrawing their hedging volumes from the market in order to form a 'natural hedge'.

53. Market participants have submitted that if hedge trade volumes fall below a certain critical mass, which may happen with vertical integration, trades may decrease even further as financial intermediaries which engage in hedge contract trading (speculators) leave the market where the volume of trades does not exceed their minimum liquidity thresholds. Market participants have submitted that reduced participation by energy market participants in hedge contract trading may have a spiral effect on the level of liquidity, as the participation of speculators in the hedge contract markets is dependent on there being sufficient market depth. Withdrawal of hedge contract availability and reduced liquidity in hedge contract markets poses a potential barrier to entry and expansion for generators and retailers that are not vertically integrated. In such circumstances, generators and retailers that are not vertically integrated may not be able to access appropriate hedging instruments, or access them at a competitive price. This could represent a barrier to entry or expansion for independent retailers because the efficiency of risk management is a key area where energy market participants may obtain a competitive advantage and is crucial for a sustainable market position.

Current supply and demand conditions in the NEM

54. The NEM is currently in a situation of excess supply (generation capacity) relative to demand (electricity use). This can be attributed to a historic trend of increasing maximum and annual demand growth that resulted in generation investment to meet anticipated capacity requirements followed by an unexpected fall in electricity demand since around 2009
55. Over the past five years, demand has declined by an annual average rate of 1.1 per cent. AEMO has projected that demand will rise on average by 0.5 per cent across the NEM during 2013-2014. For NSW, AEMO has forecast demand to grow at an annual average rate of 0.4 per cent to 2018.
56. The AER has recently stated that electricity demand has been declining as a result of factors including:
- Commercial and residential customers responding to higher electricity costs by reducing energy use and adopting energy efficiencies such as solar water heating;
 - Subdued economic growth and weaker energy demand from the manufacturing sector; and
 - The continued rise in rooftop solar photovoltaic generation (which reduces demand for electricity supplied through the grid), which has been driven by small scale renewable energy certificates and lower cost systems.
57. Maximum demand has generally flattened since 2008-2009, moving significantly below trend in the 24 months to 30 June 2013. However, the recent heatwave in January 2014 saw maximum demand in several jurisdictions of the NEM reach levels that were close to the recorded historical highs. These surpassed the levels reached in previous years and provide a new source of information with which to potentially reassess maximum demand estimates.
58. The subdued electricity demand from recent years has contributed to surplus generation capacity in the NEM, causing around 2,300 MW of coal-fired plant to

be shut down or periodically offline since 2012. Some plant is running only in summer (when demand is typically high), and other owners are rotating plant throughout the year.

59. Meanwhile, climate change policies, including the Federal Government's Renewable Energy Target scheme (**RET**) has resulted in the entry of substantial new generation (12,000GWh up to the end of 2012) in the NEM. The majority of this new generation capacity has been in the form of wind generators.

Statement of issues

60. For the purposes of this Statement of Issues, the issues in this matter are divided into two categories, 'issues of concern' and 'issues that may raise concerns'.

Issues of concern

Increased barriers to entry and expansion in the retail supply of electricity in NSW

61. The ACCC's preliminary view is that the proposed acquisition is likely to substantially lessen competition in the retail supply of electricity in NSW as a result of:
- A significant reduction of liquidity in the supply of hedge contracts due to the reduced volume of hedge contract trading as AGL's retail load will be supported with a natural hedge. This may potentially increase the risk of spot price exposure for independent retailers and, in turn, discourage participation in those markets and/or increase risk premiums in forward hedge contracts.
 - The increased ability and incentive of AGL to withhold competitively priced and customised hedge contracts to independent retailers. This would occur as a result of the changed incentives that AGL would have in the supply of hedge contracts backed by Macquarie Generation to independent retailers that compete with its retail arm.
62. Following the proposed acquisition, the three major vertically-integrated retailers would have approximately 70 per cent of electricity generation capacity and approximately 80 per cent of electricity generation output in NSW as well as over 85 per cent of the retail electricity load in NSW (supplied to both mass market and large customers) in NSW. The ACCC is concerned that independent and new entrant retailers may find it difficult to gain the hedge contracts they need to compete aggressively in the retail supply of electricity in NSW.
63. The generation capacity and output of each of the significant power stations in NSW is detailed in the table below. Interconnector flows are not included.

AGL Energy Limited - proposed acquisition of Macquarie Generation

Table 1 – NSW generation capacity and output shares

Plant Operator	Generator	Type	Registered Capacity (2013) (MW)	Summer Rating ⁶ Capacity (MW) (2013-14)	Summer Rating Capacity Share (%)	Output (GWh) (FY2013)	Output Share (%)
Macquarie Generation	Bayswater	Base	2,640	4,740	29.2	23,340	35.7
	Liddell	Base	2,000				
Origin	Eraring	Base	2,880	3,760	23.2	12,106	18.5
	Shoalhaven	Hydro	240				
	Uranquinty	Peak	664				
EnergyAustralia	Mt Piper	Base	1,400	2,755	17.0	16,657	25.5
	Wallerawang	Base	1,000				
	Tallawarra	Intermediate	460				
Snowy Hydro	Tumut, Upper Tumut, Guthega, Blowering	Hydro	2,256	2,492	15.4	2,849	4.4
Delta Electricity	Vales Point	Base	1,320	2,044	12.6	7,545	11.5
	Colongra	Peak	724				
Other			434	431	2.7	2,921	4.5

Source: AER

64. Market participants have raised concerns that the proposed acquisition would be likely to result in a substantial reduction in the availability of competitively priced and customised hedge contracts to independent retailers in NSW. This, in turn, is likely to reduce the likelihood of entry and expansion, and hence the level of competition and price discounting in retail electricity markets to the benefit of consumers. In considering whether to enter a particular market, an electricity retailer considers a range of factors, including whether prices are regulated (and the level of those prices), the size of the market, the extent of competition and the ability to acquire hedge contracts to manage risk. An inability to obtain sufficient competitively priced and customised hedging contracts acts as a material deterrent for prospective new retail entrants.
65. The ACCC has previously noted⁷ that second tier retailers are the primary drivers of pricing, discounting and innovation competition in retail energy markets and that a sufficient number of second tier retailers are required to constrain the pricing of the major retailers. In contrast to more established retail markets, such as in Victoria where several second tier retailers have been successful in gaining market share over several years, the development and expansion of independent retailers is nascent in NSW, with several independent retailers only recently commencing operations and which have not achieved any significant growth in retail share.
66. The proposed acquisition would remove the largest source of independent (non-vertically integrated) generation capacity in the NEM. In addition, the proposed

⁶ Summer rating capacity relates to the statistically predicted contribution of generation capacity under peak summer conditions. It is typically below registered capacity because relatively high temperatures cause small de-ratings of thermal generation capacity due to equipment cooling requirements.

⁷ ACCC media release, *AGL Energy Limited – proposed acquisition of Australian Power and Gas Company Limited* (12 September 2013).

AGL Energy Limited - proposed acquisition of Macquarie Generation

acquisition would result in AGL's retail and contract position in NSW moving from being 'long' in retail – i.e. having no generation capacity and being a buyer of hedge contracts – to being net 'balanced to long' in generation – i.e. having a limited volume of generation capacity in excess of its retail load requirements. The consequence of this change in AGL's retail and contract position in NSW is that it would control a substantial volume of generation previously capable of supporting new retail entry and expansion and would have only limited excess generation available to supply hedge contracts to independent retailers. Market participants have submitted that the resulting decrease in volume of hedge contracts may reduce liquidity in trading markets to such an extent that they could cease to function as an effective source of hedge contract cover.

67. Following an AGL acquisition of Macquarie Generation, a significant volume of its available generation will form a natural hedge with AGL's retail load. Origin and EnergyAustralia are each 'long' in retail and may not represent a firm source of hedging for independent retailers in NSW. Further, approximately 70 per cent of generation capacity and approximately 80 per cent of generation output would be controlled by the three major vertically integrated retailers.
68. The ACCC notes that Snowy Hydro and Delta Electricity will likely remain 'long' in generation in NSW (i.e. having more generation capacity available than required to support their retail load). However, the ACCC understands that:
 - Snowy Hydro as a hydro-electric plant has a much less significant share of output (GWh) relative to its capacity (MW) and is primarily a source of cap contracts for peak demand periods (such as for hedging against spot prices in excess of \$300). The ACCC is considering the extent to which Snowy Hydro is likely to represent a firm source of hedging for the requirements of a new entrant or expanding retailer.
 - Delta Electricity comprises a base load plant (Vales Point, 1,320 MW) and a gas-fired peaking plant (Colongra, 724 MW). The ACCC is concerned that Vales Point, as a sole independent base load generator with a relatively small generation capacity (relative to Macquarie Generation, 4,740 MW) is unlikely to provide a sufficient level of liquidity for hedging contracts required to facilitate competitive entry conditions for new and expanding retailers in NSW. Similar to Snowy Hydro, Colongra is a source of hedging for peak demand periods only. The ACCC also understand that there may be limitations on the volume of hedge contracts that Delta Electricity can make available having regard to the reliability and costs of its generation, as well as the remaining economic life of the Vales Point power station.
69. The ACCC recognises that in an oversupplied market, a vertically integrated generator with excess capacity may have an incentive to supply hedge contracts in order to obtain wholesale price certainty and capture any additional revenue derived from the premium earned on hedge contracts over expected spot price outcomes. However, market participants have raised concerns that as Origin Energy and EnergyAustralia are 'long' in retail and represent a large source of demand for hedge contracts in NSW, AGL may hedge any remaining long position in generation by supplying hedge contracts to these major retailers and withhold supply of competitively priced hedge contracts to independent retailers, in order to maintain the current retail market structure and discourage the competitive threat of smaller players entering and expanding in that market.
70. For the above reasons, the ACCC is concerned that the proposed acquisition will have a material deterrent effect on the prospect of substantial new entry and expansion in NSW, relative to the possible future competitive environments

without the proposed acquisition. The proposed acquisition would remove a key opportunity for a large new entrant in generation or the significant expansion of a largely non-vertically integrated retailer (such as ERM Power). The ACCC considers that a new entrant is highly unlikely to build new generation of any capacity approaching the size of Macquarie Generation in the foreseeable future in light of the existing oversupply of generation in the NEM. Macquarie Generation (Bayswater and Liddell combined) is the largest generator in the NEM and the ACCC considers that the future ownership of Macquarie Generation is a critical determinant of the level of competition in NSW and the entire NEM.

71. In any of the possible future competitive environments without the proposed acquisition, competition in electricity retailing appears likely to be substantially stronger and likely to facilitate new entry and expansion compared to the future competitive environment with the proposed acquisition. The supply of Macquarie Generation's hedge contracts would either remain with an independent generator or with a significantly less vertically integrated energy retailer which has a strong focus on retailing to large business customers. In this scenario, Macquarie Generation would have significant excess generation capacity and would be owned by an entity which does not compete with mass market retailers and would therefore have no incentive to withhold competitively priced hedge contracts to independent retailers in NSW.

The ACCC invites comments from market participants on:

- Whether the proposed acquisition is likely to materially raise barriers to entry and expansion in the retail supply of electricity in NSW and /or the NEM more broadly.
- The current availability of hedge contracts in NSW and in the NEM more broadly.
- The impact of previous vertical integration on hedge contract liquidity and access to hedge contracts at competitive prices and breadth of contracting options in NSW, in other regions of the NEM, or across the NEM more broadly.
- The extent to which generation output or capacity is an accurate measure of available generation for the supply of hedge contracts.
- The extent to which Snowy Hydro and/or Delta Electricity are likely to provide a firm and competitive source of hedging for the requirements of independent retailers in NSW, in particular, independent retailers seeking to aggressively expand.
- The extent to which Vales Point power station is likely to be a competitive source of sufficient hedge contracts for the foreseeable future.
- The extent to which there is any significant difference between the current generators in NSW in the supply of hedge contracts. Which generators are currently competing strongly to make competitive offers to independent retailers? Which generators are currently not competing strongly to offer hedge contracts, and why?
- Whether, and the extent to which, independent retailers require access to customised contractual hedging instruments which have been individually negotiated with a generator, as opposed to more standardised exchange-traded contracts.
- Whether independent retailers require access to reallocation arrangements to minimise their prudential obligations and the available options for entering into hedge contracts combined with reallocation arrangements in NSW.

- Whether financial intermediaries or exchange-traded contracts represent a firm and competitive source of hedging for the requirements of independent retailers in NSW.
- The extent to which AGL would have an incentive to sell competitively priced hedge contracts to independent retailers in NSW despite the possible effect of this on its retail arm, in order to earn a premium over expected spot price outcomes on its generation output.
- In the event that Macquarie Generation either remains an independent generator or is owned by a smaller retailer, to what extent would the supply of Macquarie Generation's hedge contracts be more competitive (having regard to price and terms and conditions, such as customised contracts), and why?

Issues that may raise concerns

Market for the wholesale supply of electricity – horizontal aggregation

72. AGL is currently the largest electricity generator in Victoria (with 29 per cent of capacity) and South Australia (with 38 per cent of capacity). Following an acquisition of Macquarie Generation, AGL would also become the largest electricity generator in NSW (with 28 per cent of capacity).
73. The ACCC is concerned that the aggregation of Macquarie Generation's capacity with AGL's existing generation capacity in the NEM may have the effect of substantially lessening competition in one or more of the following markets:
 - the wholesale supply of electricity in NSW, taking into account interconnector flows;
 - the wholesale supply of electricity in a combined NSW/Victoria/South Australia market, taking into account interconnector flows; and/or
 - the wholesale supply of electricity in the NEM.
74. An increase in the price of electricity in wholesale markets is ultimately likely to flow through to the price of electricity paid by retail end users, in regulated or deregulated retail markets.
75. The main way that generators can increase spot prices is to economically withhold output. This is done by withdrawing some of their generating capacity from lower price bands and submitting it into higher price bands. An alternative to economic withholding is physical withholding, which can take a number of forms including mothballing units (or not repairing units), not running units for parts of the year, or retiring a plant altogether.
76. A generator must have sufficient generation capacity available to engage in such a strategy. In particular, it will have a reduced incentive to engage in such a strategy to the extent that it needs to supply electricity to support its hedge contract or retail commitments. However, as noted above, firms are able to modify their hedge contract levels over time to increase their level of exposure to the spot market if they wish to take advantage of expected market circumstances.
77. Market participants have raised concerns that because AGL has a large portfolio of generation assets across the NEM, including the largest share of generation in Victoria and South Australia, a withdrawal of electricity supply that causes an increase in wholesale spot prices may be a more profitable strategy for AGL compared to other potential acquirers of Macquarie Generation with less

generation assets in the NEM. This is because the benefits of the higher prices caused by a withdrawal of supply would be spread across a larger generation portfolio.

78. In addition, the ACCC is considering whether AGL would have an incentive (compared to a different purchaser or the status quo) to operate the Liddell power station less often, mothball generation units⁸, or otherwise prematurely retire the Liddell power station altogether in order to withhold supply. Such a strategy would reduce any excess generation capacity of AGL in NSW and may result in a tightening of the supply and demand balance in NSW with flow on impacts which benefit AGL's positions in Victoria and South Australia.
79. As AGL does not currently have generation capacity in NSW, the proposed acquisition could only result in a material increase in market power to the extent that a wholesale electricity price increase in one NEM region could cause a corresponding increase in another NEM region. If, for example, a wholesale price increase in NSW caused a corresponding increase in Victoria and/or South Australia.
80. ACCC analysis of AEMO price sensitivity forecasts shows that for a significant number of trading intervals in 2011-2013, a large increase in demand (and price) in NSW would have resulted in a corresponding increase in price in Victoria. This demonstrates the ability of market conditions in one region of the NEM to influence the price in another region of the NEM.
81. A generator will only be successful in profitably withholding supply if it is not subject to sufficient competitive pressure from other generators. If there is competitive pressure in the market, the generator faces the risk that the output it has withdrawn or bid at a high price will be replaced by the output of other generators without significantly increasing the price.
82. AGL's hedge position is relevant in considering its incentives to engage in such a strategy. The ACCC's preliminary view is that while AGL's retail and contract position may limit the benefits that it obtains from increased wholesale prices in the short term, given the likely ultimate flow-through of high wholesale prices to higher retail prices and the fact that contract positions can be changed, AGL may have the ability and incentive to engage in a withholding strategy over the medium to longer term.
83. The ACCC is continuing to explore the likely price impacts of the merger having regards to price modelling and an analysis of underlying supply and demand conditions.

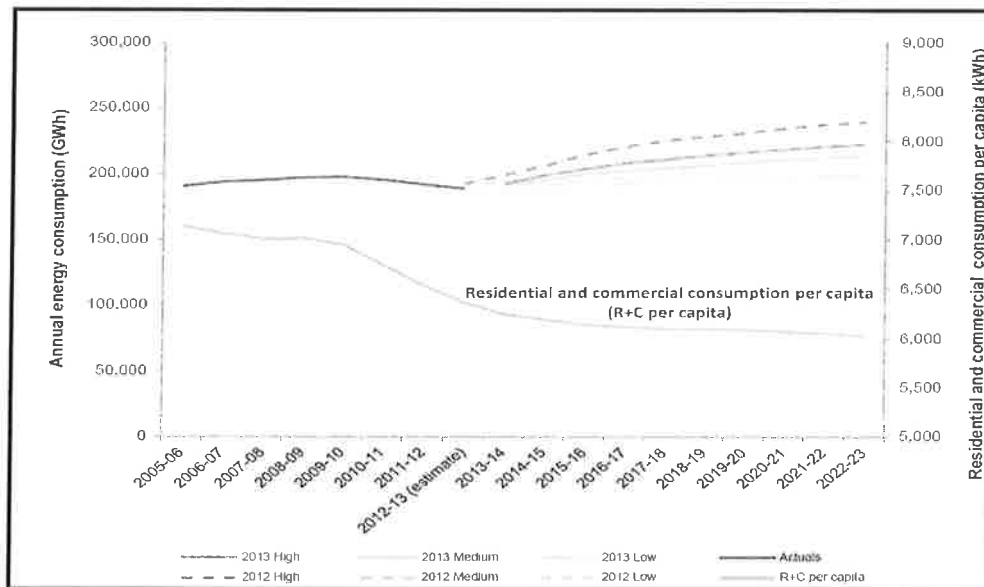
Demand conditions in the NEM

84. Demand for electricity has been declining across the NEM since approximately 2009 (Figure 1). AEMO publishes three sets of forecasts of future demand – 'low', 'medium' and 'high' scenarios. AEMO forecasts demand to grow at an annual average rate across the NEM of 0.8 per cent, 1.3 per cent and 1.6 per cent between 2013-14 and 2022-23 in the low, medium and high scenarios respectively.
85. The ACCC notes that accurately forecasting electricity demand has proven difficult in recent years, reflecting the challenges associated with current climatic

⁸ By way of example, Energy Australia has announced that it will be retiring capacity at its recently acquired Wallerawang power station in NSW. The ACCC understands that EnergyAustralia will be removing Unit 7 and Unit 8 will shortly be placed on a three month recall should market conditions change.

and economic circumstances, and given the numerous energy efficiency, renewable energy and carbon policies that have all reduced demand for electricity sourced from non-renewable (thermal) generation. However, as was noted earlier, in the week beginning 13 January 2014, Victoria and South Australia experienced very high temperatures and electricity demand levels that approached the forecast 10 per cent probability of exceedance maximum demand levels⁹ in AEMO's 2013 NEFR report.

Figure 1 – Annual energy forecasts for the NEM. Source: AEMO National Electricity Forecasting (NEFR) Report 2013



86. The ACCC considers that if electricity demand in the NEM continues to decline or experiences very low rates of growth, it is less likely that the proposed acquisition would provide AGL with opportunities to engage in profitable withholding in the foreseeable future. Conversely, if demand increases at a greater rate there is an increased risk that market conditions would be favourable for withholding in the foreseeable future.

Supply conditions in the NEM

87. Future generation capacity in the NEM is also an important determinant of whether conditions are likely to be favourable for AGL to engage in withholding of supply following the proposed acquisition. The ACCC notes that due to the depressed demand conditions outlined above, there has been minimal recent investment in coal or gas generation capacity across the NEM.
88. There has been significant recent investment in renewable generation capacity in the NEM, primarily in response to the Federal Government's RET scheme which is designed to ensure that 20 per cent of Australia's electricity comes from renewable sources by 2020. The ACCC considers that if the RET scheme is maintained at its current level, the increase in renewable generation capacity that would be required to meet the target could have a significant impact on the supply and demand balance.

⁹ The probability of exceedance maximum demand refers to the probability that a forecast electricity demand level will be exceeded. For example, a forecast 10 per cent probability of exceedance maximum demand level for a given season is expected to be met or exceeded, on average, only one year in every ten.

89. The ACCC also notes that the combination of recent low electricity demand and increase in renewable generation capacity may put pressure on owners of non-renewable generators to mothball or retire generation capacity.

The ACCC invites comments from market participants on:

- The likelihood and consequences of AGL withdrawing capacity to increase wholesale electricity prices in a number of NEM regions.
- The extent to which any strategy of AGL to prematurely mothball or retire the Liddell power station is commercially realistic.
- The sustainability of current supply and demand conditions and the potential for increases in mothballing or retirement of generation capacity.
- The extent to which mothballed generation can readily recommence supply.
- The impact of the RET on the level of generation capacity in the market and the overall supply and demand balance.
- The likely future growth rate of demand for electricity in the NEM and which (if any) of AEMO's low, medium or high forecast scenarios are likely to be accurate predictions of future demand.

ACCC's future steps

90. The ACCC has decided in the circumstances of this review to set a shorter than normal period for responses to this Statement of Issues. This reflects the extensive work done to date and the high level of cooperation received from AGL and other market participants. The ACCC is already in the process of engaging directly with AGL and market participants on the questions posed in this Statement of Issues.
91. The ACCC will finalise its view on this matter after it considers market responses invited by this Statement of Issues.
92. The ACCC now seeks submissions from market participants on each of the issues identified in this Statement of Issues and on any other issue that may be relevant to the ACCC's assessment of this matter.
93. Submissions are to be received by the ACCC no later than 17 February 2014. The ACCC will consider the submissions received from the market and the merger parties in light of the issues identified above and will, in conjunction with information and submissions already provided by the parties, come to a final view in light of the issues raised above.
94. The ACCC intends to publicly announce its final view by 4 March 2014. However the anticipated timeline may change in line with the Merger Review Process Guidelines. A Public Competition Assessment for the purpose of explaining the ACCC's final view may be published following the ACCC's public announcement.