Public Competition Assessment

17 March 2011

AGL Energy Limited and Origin Energy Limited – proposed acquisitions of assets being sold as part of the New South Wales Energy Privatisation

Introduction

1. On 9 December 2010, the Australian Competition and Consumer Commission (**ACCC**) announced its decision not to oppose a number of proposed acquisitions by AGL Energy Limited (**AGL**) and Origin Energy Limited (**Origin**) of assets being sold as part of the New South Wales Energy Privatisation. The ACCC was of the view that the proposed acquisitions would be unlikely to have the effect of substantially lessening competition in any relevant markets and would therefore be unlikely to contravene section 50 of the *Trade Practices Act 1974*, now known as the *Competition and Consumer Act 2010* (the **Act**).

2. The ACCC formed its view on the basis of the information provided by the proposed merger parties, information arising from its market inquiries and the existing knowledge of the ACCC and Australian Energy Regulator (**AER**). This Public Competition Assessment outlines the basis on which the ACCC has reached its decision on the proposed acquisitions, subject to confidentiality considerations.

Public Competition Assessment

3. To provide an enhanced level of transparency and procedural fairness in its decision making process, the ACCC issues a Public Competition Assessment for all transaction proposals where:
   - a merger is opposed;
   - a merger is subject to enforceable undertakings;
   - the merger parties seek such disclosure; or
   - a merger is not opposed but raises important issues that the ACCC considers should be made public.

4. This Public Competition Assessment has been issued because the proposed acquisitions were not opposed by the ACCC but raised important issues that the ACCC considers should be made public.

5. By issuing Public Competition Assessments, the ACCC aims to provide the public with a better understanding of the ACCC's analysis of various markets and

the associated merger and competition issues. It also alerts the public to circumstances where developments in particular markets have led, or are likely to lead, to changes in the ACCC's assessment of competition conditions in those markets.

6. Each Public Competition Assessment is specific to the particular transaction under review by the ACCC. While some transaction proposals may involve the same or related markets, it should not be assumed that the analysis and decision outlined in one Public Competition Assessment will be conclusive of the ACCC's view in respect of other transaction proposals, as each matter will be considered on its own merits.

7. Public Competition Assessments outline the ACCC's principal reasons for forming views on a proposed acquisition at the time the decision was made. As such Public Competition Assessments may not definitively identify and explain all issues that the ACCC considers arise from a proposed acquisition. Further, the ACCC's decisions generally involve consideration of both non-confidential and confidential information provided by the merger parties and market participants. In order to maintain the confidentiality of particular information, Public Competition Assessments do not contain any confidential information or its sources.

New South Wales Energy Privatisation

8. On 10 September 2009 the New South Wales government announced an Energy Reform Transaction Strategy (**Energy Reform Strategy)**. Key features of this strategy included: [1]

- The sale of the retail operations of EnergyAustralia, Integral Energy and Country Energy.
- The sale of generation trading contracts (**gentrader contracts**) for the output of the State's generators.
- The sale of future power station development sites.
- State-owned electricity transmission and distribution networks to remain in public ownership and the New South Wales independent pricing regulator to continue to set regulated retail prices until at least 2013.
- The preparation by the New South Wales Government of a potential share market listing of an entity that combines the retailing operations of Integral Energy, the generation trading contract for Eraring Energy and the development site at Bamarang on the New South Wales South Coast (the potential IPO assets) – this aspect of the strategy was dependent on the outcomes of the privatisation processes for the gentrader contracts and retail businesses.

9. The Energy Reform Strategy underwent some modifications between the first announcement of the strategy and the time of the ACCC's merger reviews.[2]

[1] This is not a complete list of all aspects of the government's energy reform strategy. See – Joe Tripodi MP, *Media Release*, 10 September 2009.
[2] Refer to http://www.nsw.gov.au/energy.

However, the government progressed its plans to privatise the following assets (the **sale assets**):

Gentrader contracts:

- Delta Western: 2400 megawatts (MW) (Mount Piper and Wallerawang)[3]
- Delta Coastal: 2644MW (Vales Point, Munmorah and Colongra)[4]
- Eraring: 2972MW (Eraring and Shoalhaven Scheme)[5]
- Macquarie: 4844MW (Bayswater, Liddell and Hunter Valley Gas)[6]

10. These contracts grant the purchaser the right to trade the capacity of the relevant generator in the National Electricity Market (**NEM**). The Government proposed to retain ownership of the generators themselves.

11. The gentrader contracts provide the owner (a **gentrader**) with control over all decisions regarding the dispatch of the relevant generator into the NEM. Broadly this means that the gentrader will be responsible for decisions regarding the quantities and the prices at which the generator is to be bid into the NEM and will receive the revenue from dispatch into the NEM. The gentrader will also be responsible for decisions regarding financial derivatives (hedge contracts) backed by the relevant generator.

Retail businesses:[7]

12. The New South Wales Government offered the following retail businesses for sale (the **NSW Government retail businesses**):

- Country Energy: more than 850,000 electricity and gas retail customers, predominantly in New South Wales and mostly electricity customers.
- Integral Energy: more than 850,000 gas and electricity retail customers in New South Wales and Queensland.
- EnergyAustralia: more than 1.3 million gas and electricity retail customers in New South Wales.

13. The Government offered bidders the opportunity to purchase the gas and electricity customer bases of the above retailers as separate businesses or to purchase the retailers in their entirety.

Development sites:

14. The Government proposed to sell seven sites which have been identified for the development of generating capacity. Table 1 outlines the sites and the status of the requisite planning approvals, current at the time that the ACCC made its decision.

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[3] This figure is approximate.
[4] This figure is approximate.
[5] AER, *State of the Energy Market 2010*.
[6] Ibid.
[7] The customer numbers are approximate.

Table 1 Generation development sites

Site	Size (MW)	Fuel	Status
Delta Electricity			
Bamarang	300-450	Gas	Full Development Approval
Marulan	300-450	Gas	Full Development Approval
Munmorah	700	Gas/Coal	Planning process underway
Mt Piper Extension	2000	Gas/Coal	Planning process underway
Macquarie Generation			
Bayswater B	2000	Gas/Coal	Planning process underway
Tomago	500-790	Gas	Planning process underway
EnergyAustralia			
Marulan	350	Gas	Director-General's requirements issued

The parties

Origin Energy Limited

15. Origin is an ASX-listed Australian integrated energy company with operations including:

Electricity retailing

- Origin supplies electricity to approximately 1.8 million customers in Victoria, South Australia, Queensland and NSW.

Electricity generation

- Queensland
  - Bulwer Island 32MW
  - Darling Downs (630MW)
  - Mt Stuart (414MW)
  - Roma (74MW)
- New South Wales
  - Uranquinty (640MW)
  - Cullerin Range (30MW – wind)
- Victoria
  - Mortlake (550MW – scheduled for completion in 2011)
- South Australia
  - Ladbroke Grove (80MW)
  - Osborne (180MW)
  - Quarantine (216MW).
- Origin has a portfolio of wind development options of more than 3,400 MW in various locations.

Gas retailing

- Origin supplies natural gas to approximately 845,000 customers located in Victoria, South Australia, and Queensland.

Gas production

- Origin owns and operates gas production assets including onshore and offshore exploration permits and onshore processing facilities. Its production interests are in the Cooper, Surat, Otway, Perth and Carnarvon basins.

AGL Energy Limited

16. AGL is an ASX-listed Australian integrated energy company with operations including:

Electricity retailing

- AGL supplies electricity to approximately 2.1 million customers in Victoria, South Australia, Queensland and NSW.

Electricity generation

- Victoria
    - Loy Yang A power station (2,200MW) of which AGL owns a 32.5 per cent equity share;
    - Somerton power station (150MW)
    - A group of hydro electric power stations totalling 748.5 MW generating capacity
    - A number of wind farm projects totalling 487 MW capacity of which 67 MW is under construction.

- South Australia
    - Torrens Island power station (1,280MW)
    - Angaston power station (49 MW)
    - A number of wind farm projects totalling 441 MW capacity of which 184.5 MW is under construction.
- New South Wales – generation development sites:
    - Leaf's Gully (potentially 300 MW)
    - Dalton (potentially 1500 MW)
- Queensland
    - Oakey power station 282 MW
    - Yabulu power station 121 MW

Gas retailing

- AGL supplies natural gas to approximately 1.6 million customers located in Victoria, South Australia, New South Wales and Queensland.

Gas production

- AGL has a number of investments and operations in gas exploration and development and production tenements, as well as for exploration and development of geothermal renewal energy sources.

17. AGL also owns 50% of ActewAGL, a utilities business operating in the Australian Capital Territory (**ACT**) and surrounds.

The asset combinations

18. In this matter, the nature of the sales process was such that bidders were able to lodge a number of bids comprising different asset combinations. Both Origin and AGL approached the ACCC prior to the selection of successful bids by the NSW Government to obtain the ACCC's views on a number of proposed bids. These included various combinations of the electricity and/or gas retail businesses that were offered for sale by the NSW Government.

19. The ACCC considered the following proposed acquisitions by Origin and AGL.

Origin:

Retail businesses –

- EnergyAustralia, or
- Country Energy, or
- Integral Energy, or
- both Country Energy and Integral Energy

together with one of the following gentrader contracts –

- Eraring; or
- Delta Coastal; or
- Delta Western;

together with one generation development site.

AGL:

Retail businesses –

- Country Energy, or
- Integral Energy;

together with one of the following gentrader contracts –

- Eraring; or
- Delta Coastal; or
- Delta Western;

together with one or more generation development sites.

20. On 14 December 2010, the New South Wales government announced the outcomes of the privatisation process, as follows:

- Origin Energy was the successful bidder for the combination of Country Energy, Integral Energy and the Eraring gentrader contract; and
- TRUenergy was the successful bidder for the combination of EnergyAustralia, the Delta West gentrader contract and the Mt Piper Extension and two Marulan development sites.[8]

Industry background

Electricity

21. The New South Wales generators and retailers participate in the NEM. The NEM is a wholesale spot market through which generators and retailers trade electricity in eastern and southern Australia.[9]

22. There are five regions of the NEM – NSW, Queensland, Victoria, Tasmania and South Australia. These regions are physically linked by an interconnected transmission network.

23. There are approximately 200 large electricity generators operating in the NEM. The electricity produced by generators is commonly characterised in terms of its power (usually measured in units of megawatts) and energy (usually measured in megawatt hours or gigawatt hours).[10]

24. The electricity generation capacity in New South Wales is approximately 17,329 MW. Of this capacity approximately 90 per cent is attributed to the state-owned generators and Snowy Hydro, of which the New South Wales Government owns 58 per cent.

25. The main customers in the NEM are energy retailers who package wholesale electricity with network connection services for sale to residential, commercial and industrial energy users.[11] The retail supply of electricity in New South Wales is fully contestable, meaning that all customers are permitted to enter a supply contract with a retailer of their choice.

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[8] On the basis of the information obtained in relation to this matter, the ACCC considered that the proposed acquisition of these assets by TRUenergy did not raise sufficient competition issues to pursue a public merger review.

[9] As discussed in this Public Competition Assessment, the ACCC considers that for the purposes of competition analysis, there is a separate wholesale electricity market in New South Wales. The ACCC uses the terminology of ‘the NEM’ as a descriptor term only.

[10] For example, a 100-watt light globe uses 100 watts of electricity. One megawatt is equal to one million watts. One megawatt hour is the energy required to power ten thousand 100-watt light globes for one hour. One gigawatt hour is equal to 1000 megawatt hours.

[11] Australian Energy Regulator, *State of the Energy Market 2010*.

26. Retail prices ('tariffs') are regulated by state-based regulators.[12] In New South Wales, the Independent Pricing and Regulatory Tribunal (**IPART**) determines regulated tariffs which apply to small retail customers who are supplied by standard retail suppliers (Country Energy, Integral Energy and EnergyAustralia) on standard contracts.[13] Customers may choose to be supplied according to a standard contract, which comprises regulated tariffs, or they can opt for a market based contract which comprises an unregulated tariff offered by a retailer, usually at a level below the standard tariff. The total number of customers on standard contracts is approximately 25 per cent of New South Wales electricity demand.

27. Electricity produced by generators is transported on a transmission system. In New South Wales, the electricity transmission assets are owned by TransGrid and Ausgrid, which are both New South Wales Government entities. The AER regulates the transmission revenue of these businesses according to the National Electricity Rules (NER).

28. Distribution networks carry electricity from points on the transmission networks and deliver it at lower voltages to consumers through electricity connections at residential and commercial locations. In New South Wales the three electricity distributors are Ausgrid, Endeavour Energy and Essential Energy, which are all owned by the New South Wales Government. Similar to the process for regulated transmission revenue, the AER makes revenue determinations for the three New South Wales distributors. The electricity distribution businesses of Energy Australia, Integral Energy and Country Energy are not part of the New South Wales energy privatisation process.

Risk management in the NEM

29. Wholesale spot electricity prices are volatile over time, but retailers generally offer electricity prices that are fixed over a period of time to their customers. Therefore, retailers face the risk that the costs of purchasing wholesale electricity from the volatile spot market will exceed the revenues they earn from their customers.

30. Retailers manage this risk by entering into financial derivative contracts that provide a form of insurance against the possibility that they will pay more for the electricity than the revenue they receive from customers. These contracts are commonly known as hedge contracts. In most cases the counterparties to hedge contracts are a retailer and a generator.

31. In its simplest form, a hedge contract nominates a 'strike price' and the counterparties will pay one another according to the difference between actual spot prices and the strike price. For example, if a generator sells a simple swap contract to a retailer at a certain price per MW (which in this case is the strike price), it is effectively 'committed' to offer the contracted quantity into the NEM

[12] Retail prices are not regulated in Victoria. Gas prices are not regulated in the ACT.
[13] Each area in NSW has a nominated Standard Retail Supplier. These are required to make supply available on the tariffs and charges set by a determination of IPART. Standard Retail Suppliers and new entrant retailers may also offer customers competitive or negotiated contracts. These contracts are not regulated by IPART and the prices charged under them are negotiated between the retailer and the customer.

at the contracted price. If actual spot prices are higher than the strike price, the generator must pay the retailer the difference between the spot price and strike price. If spot prices are lower than the strike price, the retailer will pay the difference to the generator.

32. Increasingly, generators and retailers are managing their risk by vertically integrating. The more that a party is vertically integrated, the less likely it will participate in trading hedge contracts to manage its risk. Therefore, the extent of vertical integration may have implications for the availability of hedge contracts for parties who still want to manage risk via financial contracts.

Queensland retail market

33. In 2006-07 the Queensland Government privatised its electricity retailers, with the exception of Ergon Energy, which supplies the majority of customers in rural and regional areas. Other retailers can make offers to supply Ergon's customers, however Ergon cannot compete for other customers.

Gas

34. Gas producers sell natural gas both for domestic markets and for export as liquefied natural gas.

35. High pressure transmission pipelines transport natural gas from production fields over long distances to domestic demand centres. A network of distribution pipelines then delivers gas at lower pressure from points along the transmission pipelines to industrial customers and to consumers in cities, towns and regional areas.

36. Energy retailers buy wholesale gas and package it with transportation services to sell to customers.

37. In New South Wales, there is a wholesale Short Term Trading Market (**STTM)** for gas, which operates in conjunction with longer term gas supply and transportation contracts between gas producers, transmission pipeline owners and buyers of wholesale gas.

38. The STTM is a market-based gas balancing system which has been established at the Sydney and Adelaide gas hubs. It is designed to ensure that gas that is produced and injected into a pipeline system remains balanced with gas withdrawn for delivery to customers. The STTM sets a daily clearing price at each hub, based on bids by gas shippers to deliver gas. The market operator is the Australian Energy Market Operator (**AEMO**). AEMO settles, at the clearing price, the difference between each participant's daily deliveries and withdrawals of gas.

39. Gas retail prices are regulated in New South Wales by IPART.

ACCC review timeline

40. The timeline of key events in this matter is as follows:

Table 2 ACCC review timeline

Date	Event
3 September 2010	ACCC commenced review under the Merger Review Process Guidelines.
13 September 2010	Closing date for submissions from interested parties.
18 October 2010	ACCC requested further information from the NSW Government regarding the privatisation assets. ACCC timeline suspended.
5 November 2010	ACCC received further information from the NSW Government. ACCC timeline recommenced.
24 November 2010	The NSW Government advised that it is conducting further analysis of bids for the privatisation of electricity assets. The ACCC therefore deferred its decision and restarted the timeline when further information was received from the Government.
3 December 2010	ACCC received further information from the NSW Government. ACCC timeline recommenced.
9 December 2010	ACCC announced it would not oppose the proposed acquisition.

Market inquiries

41. The ACCC conducted market inquiries with a range of industry participants, including competitors, potential competitors, customers, industry bodies, financial intermediaries and other interested parties. Submissions were sought in relation to the substantive competition issues.

Market definition

42. The ACCC considered the proposed acquisitions in the context of markets for:

- the wholesale supply of electricity in New South Wales;
- the retail supply of electricity in New South Wales;
- the retail supply of electricity in Queensland; and
- the retail supply of gas in New South Wales.

Wholesale supply of electricity

Product dimension

43. In defining the relevant markets for the purposes of examining the proposed acquisitions, the ACCC considered whether the supply of wholesale electricity and the supply of hedging contracts and electricity derivatives should be considered as separate markets, or both part of a combined market.

44. Generators (including gentraders that assume the electricity trading functions carried out by generators) primarily earn revenues by selling physical electricity into the NEM and also via hedge contracts they enter into with electricity retailers and other counterparties. However, electricity retailers can only acquire physical

electricity from the NEM. The hedge contracts that they enter into with generators (and other counter-parties) are not contracts for the supply of physical electricity – as noted above they are types of risk management instruments.

45. In *Australian Gas Light Company v Australian Competition & Consumer Commission (No.3) [2003] FCA 1525 (Loy Yang)*, French J found that, for the purposes of that matter[14]:

> *"…derivative contracts ought to be regarded as an integral part of the pricing and payment arrangements between generators and retailers in relation to the underlying product, which is electrical energy, and which they deal with 'as if' it had been sold from supplier to retailer."*

46. However, in this matter the ACCC considered that while hedge contracts and physical electricity are both related to the supply of electricity, they are not demand side or supply side substitutes. Retailers automatically pay for all electricity consumed by their customers through the NEM at the spot price. Hedge contracts are used to manage risk associated with the volatility of the spot price. Retailers are not able to substitute the hedge contracts that they hold for physical electricity, nor is a hedge contract a means of paying for the acquisition of physical electricity.

47. Accordingly, the ACCC took the view that the supply of hedge contracts should not be considered to be in the same market as the wholesale electricity market in NSW. For the purposes of assessing the competitive effects of the proposed acquisitions, the ACCC took account of hedging contracts as an essential input to participation in the relevant markets. In this regard, the ACCC's analysis proceeded on the basis that hedge contracts are primarily traded by generators and retailers within a region of the NEM.

Geographic dimension

48. In the NEM, a spot price in each region is calculated based on the bid of the most expensive generator required ('dispatched') to meet regional demand. The spot price may vary from region to region because of two aspects of the transmission network. First, losses are incurred from where electricity is produced to where it is to be consumed. These losses can lead to different prices in adjoining NEM regions. Second, constraints can be encountered when electricity is transported across the network. These constraints, particularly when they influence the operation of interconnectors into a region, can lead to electricity prices for that region being set independently from the other regions.

49. The ACCC noted that, particularly during periods of high demand for electricity in New South Wales, there is often a substantial reduction in the interconnectivity with Victoria and Queensland, which limits the ability of generators outside of New South Wales to compete with New South Wales generators.

50. The ACCC considered the proposed transaction on the basis that the geographic scope of the relevant market was the New South Wales region plus the Victorian and Queensland interconnectors. This recognises that although generators outside

[14] At paragraph 382.

of New South Wales do compete, their ability to do so is limited by the capacity of the interconnectors.

51. Having found that the transaction was unlikely to result in a substantial lessening of competition on the basis of a New South Wales geographic market, it was unnecessary to consider the possibility that the geographic scope of the market might be broader.

Markets for retail supply of electricity and gas

Product dimension

52. The New South Wales government retail businesses, along with AGL and Origin, purchase wholesale electricity and/or gas and package it for sale to customers, including large industrial customers, small-medium business customers and households. Retailers are responsible for billing customers according to their energy consumption. Retailers compete to win customers by offering discounts below the regulated tariff and/or through non-price offers such as vouchers or gifts and through customer service.

53. The ACCC found that there is limited demand-side substitution between electricity and gas at the retail level, particularly for residential customers. For the most part, gas and electricity are adopted by customers for different end-uses.

54. On the supply side, the ACCC found that there was a degree of commonality between gas and electricity retailing. Most energy retailers supply both gas and electricity, and provide customer services and billing services for both types of fuel. However, it is necessary for retailers to have separate arrangements in electricity and gas wholesale markets before they can supply each respective product at the retail level. Accordingly, it was found that a retailer of either electricity or gas cannot switch its operations quickly and without significant investment to retailing the other form of energy.

55. On balance, the ACCC considered it was appropriate to assess the proposed acquisitions in the context of separate markets for the retail supply of electricity and the retail supply of gas. However, in analysing the competitive implications of the proposed acquisitions, the ACCC took into account that both gas and electricity retailers may have particular capacity and incentives to enter areas of energy retailing in which they do not have an existing presence.

Geographic dimension

56. There is effectively no scope for demand-side substitution on a geographic level for the retail supply of electricity, or the retail supply of gas. It is self-evident that a customer's supply of energy is physically limited to the location of their connection to the distribution network. As such, a customer cannot substitute supply of electricity or gas to this connection for a connection at another location.

57. On the supply-side, the ACCC observed that most electricity and gas retailers operate across several regions. Market inquiries indicated that new entrant retailers often outsource customer service and marketing resources to specialist companies who are located within the region in question. This appears to have

assisted retailers to establish retail electricity and/or gas services in various regions of the NEM. As such, deploying some of the physical inputs for retailing does not necessarily require a retailer to be based in a particular State.

58. However, it is necessary for a retailer to also secure a number of inputs specific to a region that cannot be so easily or quickly obtained.

59. In relation to electricity retailing, a retailer would need to acquire a retail licence and negotiate the procurement of wholesale electricity and hedge contracts with generators located within that region for risk management. There are similar requirements in gas retailing, where in addition to the procurement of a retail licence and wholesale gas, a retailer must negotiate access to transmission pipelines which transport gas from wholesale gas basins to locations in New South Wales. Therefore, a retailer of gas or electricity in one region cannot switch its operations quickly and without significant investment to supply another region.

60. In light of the above factors, the ACCC considered that state-based retail markets were appropriate for assessing the proposed acquisitions, but noted that there are several aspects of retailing which can take place on a broader geographic level which might assist a retailer in one region expanding into other regions.

With/without test

61. In assessing a merger or acquisition pursuant to section 50 of the Act, the ACCC must consider the effects of the transaction by comparing the likely competitive environment if the transaction proceeds (the “with” position) to the likely competitive environment if the transaction does not proceed (the “without” or “counterfactual” position).

Retail electricity and gas markets

62. In the context of an ongoing bidding process, the ACCC’s approach to identifying the relevant counterfactual in respect of each of the sale assets was to identify bids with some likelihood of success, and to assess the competitive effects of each of the proposed acquisitions against other such bids. In this regard, the ACCC’s inquiries indicated that such alternative bids to each of the proposed acquisitions would involve the acquisition of each of the three retail businesses by separate entities that were existing market participants in the New South Wales electricity and gas retail markets.

63. The ACCC found that while the adoption of different alternative bids as the relevant counterfactual might impact to some extent on the level of market concentration in the relevant markets, ultimately this would not have a material impact on the outcome of the competitive analysis. Accordingly, the ACCC did not need to form a final view on any particular alternative bid as the likely counterfactual in this matter.

Wholesale electricity market

64. With regard to the proposed acquisition of gentraders and/or development sites by Origin and AGL (in various combinations), the ACCC identified that the likely counterfactual would be the sale of the gentraders and/or development sites to other parties. These parties might include existing participants in the wholesale electricity market in New South Wales or new entrants in this market. The ACCC found that the adoption of different alternative bids as the relevant counterfactual might impact to some extent on the level of market concentration in the relevant markets. However, the ACCC found that ultimately this would not impact on the outcome of the competitive analysis. Accordingly, the ACCC did not need to form a final view on any particular alternative bid for the gentrader contracts and/or development sites in question as the likely counterfactual in this matter.

Vertical integration

65. Origin and AGL proposed to acquire various combinations of gentrader contracts and electricity retail businesses. These proposed acquisitions would result in varying degrees of vertical integration in the relevant markets. The ACCC found that the likely counterfactual for these proposed acquisitions would involve alternative bids that would also result in varying degrees of vertical integration. Similar to the ACCC's approach in relation to the retail and wholesale markets, the ACCC found that the adoption of different alternative bids as the relevant counterfactual might impact to some extent on the level of vertical integration in the relevant markets, but ultimately this would not impact on the outcome of the competitive analysis. Accordingly, the ACCC did not need to form a final view on any particular alternative bid as the likely counterfactual in assessing the competitive implications of vertical integration arising from the proposed acquisitions.

Competition analysis

Retail markets for the supply of electricity and gas in New South Wales

66. The ACCC considered whether the proposed acquisitions by Origin and AGL would be likely to result in a reduction of price-based competition beneath the regulated retail tariffs or a reduction in service quality in relation to each of the retail energy markets in New South Wales. Key factors that were taken into account were market concentration arising from the proposed acquisitions, the nature of existing competition in the relevant markets, and barriers to entry and expansion.

Market concentration

67. In New South Wales there are 26 electricity retail licence holders, of which 12 currently supply small retail customers. There are currently 17 gas retail licence holders in New South Wales, though only 7 are active.[15]

[15] Source: *Review of regulated retail tariffs and charges for electricity 2010-2013*, IPART, March 2010.

68. Since the introduction of full retail competition, EnergyAustralia, Integral Energy and Country Energy have gradually lost market share to new entrants in the New South Wales retail market. Nonetheless, these retailers continue to supply electricity to approximately 80 per cent of customers in New South Wales. In the gas retail market, AGL is the incumbent as well as largest retailer in New South Wales, with over 75 per cent of customers. Broad estimates of market shares are shown in Table 3.[16]

Table 3 New South Wales retail market shares – electricity and gas

Retailer	Electricity (%)	Gas (%)
EnergyAustralia	30-40	10-20
Country Energy	20-30	0-5
Integral Energy	20-25	<1
AGL	10-15	~75
Origin	5-10	1-5
TRUenergy	0-5	1-5
Others	0-5	<5

Source: ACCC estimates based on various sources.

69. The acquisition by AGL or Origin of Country Energy or Integral Energy would increase concentration in the retail markets for electricity and gas in New South Wales, albeit to a lesser extent in the gas market.

70. As noted above, the likely counterfactual adopted for the purpose of assessing the proposed acquisitions was that each of the New South Wales Government retail businesses would be sold to another participant in the New South Wales retail market if not AGL or Origin. Therefore, the level of market concentration resulting from each of the proposed acquisitions would be a matter of degree.

71. It was noted in particular that a proposed acquisition by Origin of both Integral Energy and Country Energy would provide Origin with a post-merger market share in the range of 45% - 65% in the New South Wales retail electricity market, and would likely result in a significant increase in market concentration in that market. A proposed acquisition by AGL of either Integral Energy or Country Energy would provide AGL with a post-merger market share between a range of 30% - 45% in that market.

72. The ACCC considered that the proposed acquisitions of the gas retail businesses would not result in a significant increase in the level of market concentration in the New South Wales retail gas market. In particular, it was noted that although AGL is the largest retail supplier of gas in New South Wales, Country Energy and Integral Energy had a minimal presence in that market. AGL did not propose to bid for Energy Australia, the other significant competitor in that market. On this basis, the ACCC considered that the proposed acquisitions would not be likely to substantially lessen competition in the market for the retail supply of gas in New South Wales. Therefore, this market has not been addressed further in this competition analysis.

[16] The ACCC had more precise market share data that was provided to it on a confidential basis.

Existing competitors and barriers to entry

73. In conducting its assessment, the ACCC considered the likely level of competitive tension from potential new entrants as well as existing competition in the market.

74. With regard to new entry, the ACCC found that the key requirements for entering a retail electricity market are the purchase of wholesale electricity and hedge contract cover, a retail licence, marketing, and customer service and billing capabilities. New and existing retailers must also satisfy AEMO's prudential requirements. This typically involves a retailer lodging a payment that acts as a guarantee of its ability to meet future financial obligations including wholesale market purchases and use of network costs.[17]

75. In analysing barriers to entry in relation to the New South Wales and Queensland retail electricity markets, the ACCC had regard to examples of new entry in regions within the NEM since full retail competition started, including a number of cases where new entrants had grown to around 10-11 per cent market share in approximately three years.

76. However, market inquiries indicated that there may be barriers to retailers expanding to market shares that were significantly greater than these levels. Some market participants noted that to expand beyond this size, it may be necessary to vertically integrate with generation in order to secure a stable supply of wholesale energy and hedge cover. Market participants also stated that, except for 'marginal' customers who are receptive to the idea of switching retailers, there is still a reasonable amount of customer inertia within retail markets which can suppress retailers' abilities to build higher market shares.

77. Despite these issues, however, the ACCC found that smaller retailers have often exerted competitive constraint upon large electricity retailers by offering discounts below the regulated retail tariffs. The offers of discounts by new entrants have either resulted in the new entrants winning market share from their larger competitors or causing them to match the new entrants' offers to defend their market shares, resulting in lower prices for customers. The ACCC considered that there were no impediments to this competitive process continuing in New South Wales in the future provided there are sufficient margins available between the costs of retailing and regulated tariffs.

78. Accordingly, the ACCC found that new entry was likely to impose some ongoing competitive constraint on either AGL and/or Origin in relation to any of the proposed acquisitions.

79. In addition, the ACCC found that a number of competitors of a significant size and likely to provide ongoing competition would remain in the relevant markets, irrespective of which proposed acquisition proceeded. The ACCC obtained data

[17] Market inquiries revealed that in some cases, prudential obligations were triggered if the retailer did not have a particular credit rating and that this could favour incumbent retailers who had established a track record of income from their retail customers. The ACCC noted that some of these requirements were the subject of regulatory reviews designed to ensure that they did not deter new entry.

which indicated that customer switching occurred between a range of retailers including the government-owned businesses, Origin, AGL and a number of other retailers who had entered the market since full retail contestability commenced.

Summary

80. The ACCC concluded that the respective proposed acquisitions by AGL or Origin of Integral Energy or Country Energy were not likely to substantially lessen competition in the market for the retail supply of electricity in New South Wales due to likely continued competition from existing competitors, and a degree of potential competition from new entry. The ACCC did not consider that the competitive analysis would be significantly altered if Origin and AGL were to acquire either or both the gas and/or electricity parts of the NSW Government's retailers.

81. With regard to Origin's proposed acquisition of both Country Energy and Integral Energy, the ACCC noted that this proposed acquisition would result in the aggregation of two of the three largest electricity retailers in New South Wales when compared with any of the likely counterfactuals where the three largest electricity retailers would remain separately owned.

82. However, the ACCC also took into account the fact that if that proposed acquisition proceeded, EnergyAustralia would be acquired by a third party (other than AGL which did not bid for Energy Australia). The ACCC found that AGL is a strong competitor in New South Wales, largely due to its retail gas incumbency and expanding electricity customer base. The ACCC considered it was likely that AGL would continue to leverage its large gas customer base and well-known brand to expand its presence in electricity retailing in New South Wales. It was found that this would be likely to impose a strong competitive constraint on Origin and the acquirer of EnergyAustralia.

83. The ACCC took the view that new entry, together with continued competition from existing players, would be likely to preserve competitive tension in the retail markets. Origin would face competition in electricity retailing from the separate acquirer of EnergyAustralia, smaller players, as well as AGL.

84. The ACCC therefore concluded that the acquisition of Integral Energy and Country Energy by Origin was unlikely to substantially lessen competition in the market for the retail supply of electricity in New South Wales.

Retail market for the supply of electricity in Queensland – proposed acquisitions of Integral Energy

85. In Queensland, Origin and AGL are two of the three incumbent retailers in the region following privatisation approximately four years ago. Origin currently supplies electricity to more than half of the customers in south-eastern Queensland. The third incumbent, Ergon Energy, only supplies to regional non-contestable customers.

86. Integral Energy entered the Queensland electricity market when full retail competition was introduced in that state. Over a period of approximately 3-4 years, Integral Energy has obtained a market share of approximately 10 per cent.

At the time of the ACCC's review, it was the third largest electricity retailer in the contestable segment of the Queensland electricity market.

87. The ACCC noted that the acquisition of Integral Energy by Origin would significantly increase the level of concentration in the retail market for the supply of electricity in Queensland. The combined entity would have over 60 per cent market share. The proposed acquisition of Integral Energy by AGL would result in AGL having approximately 40 per cent market share.

88. Although Integral Energy's market share grew quickly, the ACCC's market inquiries indicated that other retailers were similarly competitive in the Queensland market.

89. For instance, while Integral Energy had actively promoted itself as an alternative supplier by offering electricity price discounts, these were not traits that were unique to Integral Energy. The ACCC also had regard to information which indicated that, over a period of time, incumbent retailers in Queensland had been promoting discounts and making counter offers to customers in response to the offers of several competitors. These include smaller competitors such as Lumo, Click Energy and Australian Power and Gas as well as larger retailers such as TRUenergy. The ACCC considered that this indicated that in addition to Integral Energy, smaller retailers were capable of competitively constraining the incumbents and this resulted in lower prices for customers.

90. Market inquiries revealed that barriers to entry and expansion in the Queensland retail electricity market were similar to other parts of the NEM, as outlined above.

91. Therefore, the ACCC considered that given a sufficient price incentive, new retailers would be likely to enter the Queensland retail market in a timely manner and be capable of competitively constraining the merged entity. In particular, the ACCC considered that new entry and expansion up to the level achieved by Integral Energy could be replicated in the future.

92. The ACCC therefore concluded that while the proposed acquisition of Integral Energy by Origin or AGL would result in either party obtaining a significant market share, such acquisitions would not be likely to substantially lessen competition in the market for the retail supply of electricity in Queensland.

Wholesale supply of electricity in New South Wales

93. The acquisition of a gentrader contract provides the acquirer with the ability to trade the electricity produced by the relevant generator and the ability to sell associated hedge contracts. Therefore, the ACCC's analysis of the proposed acquisitions is based on the assumption that the gentrader is effectively standing in the place of the relevant generator.

94. The ACCC considered whether the proposed acquisition by either Origin or AGL of one of the gentrader contracts, and a generation development site or sites as relevant, would be likely to result in a substantial lessening of competition in the market for the wholesale supply of electricity in New South Wales due to:

- The aggregation of control of generation capacity with gentrader contracts; and
- The aggregation of control of generation development sites with gentrader contracts and/or existing generation assets.

Generation capacity

95. Origin has existing generation capacity in New South Wales with the Uranquinty gas-fired generator. AGL does not currently own any generation assets in New South Wales but does have potential generating capacity if its Dalton and Leaf's Gully generation development sites are developed.[18]

96. The ACCC therefore considered whether the aggregation of any of these assets with the Eraring, Delta West or Delta Coastal gentrader contracts would result in a substantial lessening of competition in the wholesale electricity market in New South Wales. In particular, the ACCC considered whether the combination of either Origin or AGL's existing or potential generation capacity with any one of the gentrader contracts was likely to enable the acquirer to increase the wholesale (spot) market price in New South Wales to a significant and sustainable extent.

97. In this regard, it is relevant to set out in some detail the mechanism by which wholesale spot market prices are set in each region, and how individual generators can influence price.

98. Generators offer their output for sale in the wholesale (spot) market by 'bidding' portions of their capacity into price categories known as price bands. Generators are dispatched on an economic basis subject to the capacity of the transmission network.

99. The maximum bid that a generator can submit is $12,500/MWh. Subject to certain regulatory rules, a generator is able to re-bid its capacity by shifting capacity from one price band to another. Different circumstances in the relevant regional wholesale market will create different incentives for how a generator might re-bid its capacity.

100. The main way that generators can increase spot prices is to economically withhold output to create an artificial shortage of supply. This is done by withdrawing some of their generating capacity from lower price bands and submitting it into higher price bands. A strategy to withdraw capacity will usually occur at times of high demand, particularly when a generator must be dispatched to meet total market demand in a particular region. At such times, a generator would be in a position to materially influence prices in the relevant spot market.

101. A generator will only be successful in this strategy if it is not subject to competitive pressure from other generators. If there is competitive pressure in the market, the generator faces the risk that the output it has withdrawn and bid at a high price will be replaced by the output of other generators at lower prices and as a result the spot price does not materially increase.

[18] The ACCC considered this possibility although the timeframes for the development of these sites by AGL was uncertain.

102. The ACCC noted that if any of the proposed acquisitions were to proceed post-acquisition, there would continue to be several competing generators in the market as shown in Table 4.

Table 4 New South Wales electricity generation market shares

Generator	MW	%
Macquarie	4690	27.1
Eraring	3178	18.3
Delta Coastal	2644	15.3
Delta West	2400	13.8
Snowy Hydro	1950	11.3
Origin (Uranquinty)	640	3.7
QLD to NSW interconnector	550	3.2
Vic to NSW interconnector	500	2.9
TRUenergy	422	2.4
Alinta (Redbank)	145	0.8
Marubeni (Smithfield)	160	0.9
Other	50	0.3
TOTAL*	17,329	100.0
Origin + Eraring	3818	22.0
Origin + Delta Coastal	3284	19.0
Origin + Delta West	3040	17.5

Source: AEMO and AER. Summer capacity ratings. These figures are approximate.
* Does not include AGL's development sites
^At the time of the ACCC's assessment, AGL had not commenced developing the Leaf's Gully or Dalton sites.

103. The ACCC's investigation also revealed that the acquisition by Origin of one of the gentrader contracts would be unlikely to substantially increase the periods of time in which Origin's generation output would be required to meet total demand in New South Wales. Macquarie Generation will continue to be the largest generator in the region and therefore more likely to be in a position to be required to meet demand and materially influence the spot price than the other generators or gentraders.

104. AGL currently owns two generation development sites in New South Wales – Dalton (potentially 1500 MW) and Leaf's Gully (potentially 300 MW). The ACCC considered that even if this development was taken into account, if AGL were to acquire any one of the gentrader contracts, it would not be likely to be in a position to materially influence prices in the New South Wales wholesale electricity market.

105. The ACCC also noted that approximately 1400 MW of new generation capacity is proposed for development in New South Wales by parties other than AGL and Origin.

106. In light of these factors, the ACCC found that the acquisition of Eraring, Delta West or Delta Coastal by Origin or AGL would be unlikely to have a material effect on wholesale electricity prices in New South Wales.

107. The ACCC therefore concluded that the aggregation of generation capacity arising from the proposed acquisitions by AGL or Origin of one of the gentrader contracts would not be likely to substantially lessen competition in the market for the wholesale supply of electricity in New South Wales.

Generation development sites

108. The ACCC considered the proposed acquisition by Origin of one generation development site and the proposed acquisition of more than one development site by AGL. As outlined above, Origin has existing generating capacity in New South Wales with the Uranquinty generator, while AGL owns a number of other development sites.

109. As the development sites could eventually be developed to supply electricity and associated hedge contracts, the ACCC considered whether the aggregation of these sites with gentrader contracts and/or existing generation assets (in the case of Origin) would result in a substantial lessening of competition in the New South Wales wholesale electricity market.

110. The ACCC noted that there were a number of potential combinations of generation capacity, gentrader and development site interests that Origin or AGL could acquire as a result of the proposed acquisitions. The ACCC conducted its assessment by examining the likely competitive impact of the proposed acquisitions that would result in the highest level of aggregation of generation interests by either Origin or AGL, on the basis that if it was found that these proposed acquisitions would not be likely to result in a substantial lessening of competition, none of the proposed acquisitions were likely to do so.

111. In particular the ACCC examined proposed acquisitions whereby:

- AGL would acquire the largest gentrader contract (Eraring) and combine this with two development sites in addition to its existing development sites, although the ACCC was aware it was possible that not all of these development sites would be progressed; or

- Origin would acquire the Eraring gentrader contract and combine this with Uranquinty and one of the largest development sites – Mt Piper Extension.

112. The ACCC considered that in relation to either of these proposed acquisitions there would be several competing generators in the relevant market post-acquisition, including those shown in Table 4. The ACCC also noted that some of the seven development sites offered by the New South Wales government would be acquired by other parties and potentially developed into generating capacity in competition with Origin and AGL.

113. In addition, the ACCC's market inquiries revealed there are a number of new generation projects that are being developed in New South Wales by private sector generators. It is possible that further generation capacity would be developed in the foreseeable future.

114. Therefore, the ACCC considered that post-acquisition, several generators and/or gentraders would continue to compete and would be likely to constrain Origin or AGL from exercising market power by economically withholding output from the New South Wales wholesale electricity market once their respective sites were fully developed. Accordingly, the ACCC considered that none of the proposed acquisitions would be likely to result in a substantial lessening of competition in the market for the wholesale supply of electricity in New South Wales.

Nevertheless, the ACCC's analysis of the proposed acquisitions did include the consideration of the potential impact of market power in the New South Wales wholesale electricity market upon the New South Wales retail electricity market. This is discussed below.

Vertical integration of generation and retail activities

115. The proposed acquisitions by AGL and Origin of a gentrader contract, together with these parties' proposed acquisitions of a New South Wales retail business, would result in increased vertical integration between the New South Wales retail and wholesale electricity markets.

116. The ACCC considered the balance of portfolios that might result from these proposed acquisitions on the basis of the capacities of the gentraders/generators and estimates of the retail load of the retailers. Depending on the proposed acquisition in question, there would be a range of outcomes. For instance, some asset combinations would result in a merged entity that was a 'net' generator, while others would result in a merged entity that was a 'net' retailer.[19]

117. The ACCC considered whether, as a result of any of the above proposed acquisitions, increased vertical integration would be likely to increase AGL's or Origin's incentive or ability to exercise market power in the New South Wales wholesale electricity market, or retail electricity market. For instance, the ACCC examined whether any of the proposed acquisitions could substantially lessen competition in the wholesale electricity or retail electricity markets in New South Wales by providing an acquirer with an increased incentive or ability to withdraw from, or reduce its level of participation in trading hedge contracts. As availability of hedging contracts is considered to be an important input to participating in these markets and in most cases involves generators and retailers as counterparties within a region, the ACCC investigated whether the possible reduction in participation in hedging markets might stifle the ability of existing competitors and potential new entrants to compete, and thus enable the acquirer to increase prices in the New South Wales wholesale electricity and/or New South Wales retail electricity market.

118. The ACCC considered that the change in vertical integration within the New South Wales market as a result of the proposed acquisitions was not sufficient to result in the above effects. The ACCC concluded that the vertical integration of generators and retailers arising from the proposed acquisitions would not be likely to result in a substantial lessening of competition in any of the relevant markets.

Conclusion

119. The ACCC found that, in the event of a horizontal aggregation in the markets for the retail supply of electricity and gas, new entry, together with continued competition from existing players, would be likely to preserve competitive tension in the relevant retail markets.

[19] A 'net generator' would have more generating capacity than retail demand to supply; a 'net retailers' would have more retail demand to supply than generating capacity in its portfolio of assets.

120. The aggregation of Origin's Uranquinty generator with one of the gentrader contracts would not be likely to provide it with the ability to exercise significant market power in the wholesale electricity market in New South Wales due to the presence of several competing generators in the market.

121. The ACCC also concluded that the aggregation of one or more development sites with existing generation capacity and/or a gentrader contract is unlikely to increase the ability of Origin or AGL to exercise market power in the market for the supply of wholesale electricity in New South Wales.

122. Finally, the ACCC concluded that the vertical integration of generators and retailers arising from the potential acquisitions would not be likely to result in a substantial lessening of competition in the relevant markets.

123. Accordingly, the ACCC formed that view that the potential acquisitions were unlikely to substantially lessen competition in the relevant markets and would therefore not contravene section 50 of the Act.