

**AGL Energy Limited**

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

Statement of: Daniel Enoch Price

Address: 395 Collins Street, Melbourne, in the State of Victoria

Occupation: Economist

Date: 26 March 2014

**Contents**

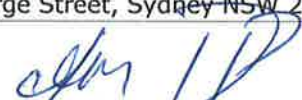
Document number	Details	Paragraph	Page
1	Affidavit of Daniel Enoch Price in support of AGL's proposed acquisition of Macquarie Generation affirmed on 26 March 2014		
2	Curriculum vitae of Daniel Enoch Price	5	2
3	Copy of report titled "General Industry Report"	36	6
4	Copy of joint report titled "Competition Issues"	40	7

I, Daniel Enoch Price of 395 Collins Street, Melbourne, in the State of Victoria, Economist, make oath and say as follows:

**QUALIFICATIONS AND EXPERIENCE**

1. I hold the position of co-owner and Managing Director of Frontier Economics Pty Ltd (**Frontier Economics**), an economics consulting firm based in Melbourne, a position I have held since 1999.
2. I hold a degree of Bachelor of Agricultural Economics from the University of Sydney.
3. I have 25 years' experience specialising in the economics of the energy sector. Over this time I have been involved in a wide range of matters relating to the design and

Filed on behalf of (name & role of party)	AGL Energy Limited, Applicant		
Prepared by (name of person/lawyer)	Liza Carver		
Law firm (if applicable)	Ashurst Australia		
Tel	02 9258 6000	Fax	02 9258 6999
Email	<a href="mailto:liza.carver@ashurst.com">liza.carver@ashurst.com</a>		
<b>Address for service</b> (include state and postcode)	Level 36, Grosvenor Place, 225 George Street, Sydney NSW 2000		



implementation of energy reforms, regulatory policies, trading and contracting strategies, contract negotiations and energy asset transactions.

4. In addition to my role at Frontier Economics I am a Director of the private IT company, Interactive Pty Ltd. I am also the owner and Chairman of a mining and resources consulting company, Metalytics, an owner and Director of an agricultural company, Brunswick Agricultural Company Pty Ltd. I am also currently chairing the Federal Government's Emissions Reduction Fund Expert Reference Group, where I report directly to the Federal Minister for the Environment the Hon. Greg Hunt MP.
5. A copy of my curriculum vitae is annexed to this affidavit and marked "**DEP-1**".
6. My three main areas of energy work can be categorised as:
  - (a) energy reform design and implementation;
  - (b) regulatory, commercial and competition advisory; and
  - (c) general energy policy.

Below, I describe key projects and types of work in each of these work areas to illustrate my skills and experience.

#### **Energy reform experience**

7. I have developed and implemented pro-competitive energy reform agendas on behalf of State Governments on three occasions. On each occasion this work involved some years of detailed design and hands-on implementation work with industry and Government. This implementation requires involvement in all stages of reform – from forming new corporations, identifying Board members, preparing legislation with Crown Solicitors, allocating assets to new companies, establishing balance sheets and financial accounts, to writing Cabinet Minutes and Parliamentary speeches and briefing the cross benches and the Opposition on legislative proposals. All of my work associated with these energy reforms has been underpinned by analysis of the economics, supported by detailed modelling.
8. I have undertaken three major reform design/implementation projects. In all this work has involved nearly 10 years of reform implementation over a 15 year period.
9. I acknowledge that the opinions I express in these sections are based wholly or substantially on the specialised knowledge I have as a result of the qualifications and experience I set out above.

#### **Queensland - December 1995 to December 1998**

10. The first of these reform implementations was for the Queensland Government between December 1995 to December 1998. Some key work areas included:
  - (a) structurally separating the major electricity monopoly businesses and creating a competitive electricity generator and retailing sector;
  - (b) establishing new governance arrangements, boards, and realigning the accountabilities between the government as shareholder and the new Boards;
  - (c) implementing, for the first time in Australia, the National Electricity Market (the **NEM**) market rules and systems. This involved detailed design and implementation of systems controls to ensure the reliability and security of the power system;
  - (d) designing and establishing billions of dollars of vesting contracts to provide financial stability to the market;

- (e) renegotiating and reallocating almost all coal contracts associated with the supply to Queensland Government owned/operated power station;
- (f) renegotiating every Power Purchase Agreement between the Government and private sector power producers to ensure they were compatible with the operation of a competitive market; and
- (g) negotiating with the NSW Government for the development of a transmission interconnect between NSW and Queensland.

***New South Wales – November 1999 to June 2002***

11. The second reform I managed was on behalf of the NSW Government. More specifically, I managed a unit called the Market Implementation Group (**MIG**) which was charged with the responsibility for completing the Government's reform agenda which had stalled after the failure to privatise the power system. This project commenced in November 1999 and our work was completed in June 2002.
12. While the Queensland reform work was ground breaking in many ways, including because it involved implementing the first trial of the NEM trading systems and the management of all the teething problems with such a complex market, the NSW work with MIG was seminal in that it involved the development of the first Full Retail Competition (**FRC**) system and the world's first mandatory greenhouse gas trading scheme (**GGAS**). The implementation of FRC entailed the development of a replacement of the vesting contracts to manage the financial risks of greater exposure to spot price variations. This involved the development of the Electricity Tariff Equalisation Fund (**ETEF**) which managed the billions of dollars of energy risk for the NSW Government which ensured the Government's ongoing commitment to the roll-out of FRC.
13. In addition to these two important policy developments I was responsible for the day-to-day management of the shareholder function on behalf of NSW Treasury. This involved improving the accountability of the Boards and the commercial performance of the NSW Government's electricity businesses.
14. During my time in MIG I was also responsible for representing the NSW Government through its responsibility to the Council of Australian Government's (**COAG**) Ministerial Council on Energy. As part of this role, on behalf of the NSW Government, I managed the development of and advocated for a suite of reforms to the NEM institutions that resulted in the abolition of the National Electricity Code Administrator and, in its place, the creation of the Australian Energy Regulator (**AER**), the Australian Energy Markets Commission (**AEMC**) and the Australian Energy Markets Operator (**AEMO**).

***New South Wales – December 2007 to June 2011***

15. From December 2007 to June 2011, I was a key member of the team advising the NSW Government on the privatisation of their electricity generators and retailers. Following the failure of the NSW Government to gain the necessary Parliamentary support to implement its preferred reforms the NSW Government commissioned Frontier Economics to develop an alternative strategy to achieve the Government's reform objectives.
16. The alternative approach involved separating the generating assets from the trading rights of the generators. The trading rights would be auctioned and the Government would be left owning the assets. This model required the development of a contract that governed the rights and responsibilities of the Government owned generator and the owner of the trading rights. This contract was known as the GenTrader contract. I was deeply involved in design and implementation of the Generation Trading Agreements for each Government-owned power station, and worked closely with a team of lawyers to prepare these contracts. My involvement in the preparation of the GenTrader contracts extended to the technical and economic modelling work required to populate the contract schedules that governed, inter alia, the technical limits of the generating plants and a liquidated damages regime.

17. In addition, I was also responsible for:
- (a) analysing the effect of the proposed emissions trading scheme (**ETS**) on the NSW Government owned electricity assets, and the wider economy and working with the Commonwealth Government to mitigate some of the more severe financial impacts of their greenhouse scheme;
  - (b) developing a financial contract reallocation to support the break-up of Delta Electricity;
  - (c) undertaking a detailed analysis of the competitive implications of the proposed transaction, and the implications for sales strategy, including the preparation of submissions to the ACCC; and
  - (d) reviewing the regulatory arrangements required to support a retail transaction, including the proposed roll-off timetable for Electricity Tariff Equalisation Fund, and the management of retail price regulation.
18. Most of the above work involved the extensive use of Frontier Economics' suite of electricity models. This included assessing and the determination of the liquidated damages regime in the Generation Trading Agreements, the contract reallocation, the assessment of the competition effects and break up of Delta Electricity, and the inputs to Treasury's financial models. All of this empirical work was subjected to intense scrutiny by the NSW Auditor General and subsequently by the Tamberlin Special Commission of Inquiry into Electricity Transactions.

#### **Other reform projects**

19. In addition to these reform implementations I have worked on many projects where I was commissioned to develop reform proposals which were either not adopted by Government or where the reforms were implemented by a Government agency.
20. In Australia, this has included working with the Western Australian Government over many years exploring different reform options, including critically evaluating the reforms proposed by the government in 2002/03.
21. More recently, from June 2011 to February 2012, Frontier Economics was commissioned to assist the Tasmanian Expert Electricity Panel appointed by the Government to investigate and report on, inter alia:
- (a) The efficiency and effectiveness of the Tasmanian energy industry with particular reference to the existing regulatory framework and the cost and operation of the energy industry elsewhere in Australia.
  - (b) The primary factors causing electricity prices to increase.
  - (c) The financial position of the state-owned energy businesses.
  - (d) Policy recommendations to inform the development of a Tasmanian Energy Strategy.
22. I led Frontier Economics' work for the Panel and this involved both empirical research and analysis and consultations with Government, industry and the Panel.
23. As well as these Australian projects I have undertaken similar projects for other countries. These are identified in my attached curriculum vitae.

#### **Energy regulation experience**

24. One of Frontier Economics' main work areas is regulatory economics. This encompasses work designing regulatory arrangements as well as implementing regulations on behalf of regulators.

25. In terms of the former, some examples that I worked on include the design of greenhouse gas abatement schemes. This includes the development of a modified emissions trading scheme jointly for the then Opposition Leader Malcolm Turnbull and Independent Senator Nick Xenophon. This work included modelling, using Frontier Economics' suite of energy models, the economic effects of the scheme compared to the Government's proposal. This modelling work was subjected to intense public scrutiny and review by the Government and other parties interested in supporting the Government's proposals.
26. Another standard area of work for me involves using Frontier Economics' suite of electricity models to assist State regulators in their determination of regulated retail electricity and gas tariffs. For example Frontier Economics has been assisting the NSW Independent Pricing and Regulatory Tribunal each year since 2007 to prepare their three yearly regulated electricity retail price determinations and each annual review. I have been involved in, more or less, identical projects for the regulators in Tasmania, South Australia and Western Australia. I have also assisted businesses prepare their submissions to State regulators undertaking similar price reviews in Queensland, NZ, Singapore and the United Kingdom. Each of these projects involved the use of our suite of electricity models. The work Frontier Economics undertakes on behalf of regulators needs to be highly transparent to ensure there is a high degree of confidence in the empirical work regulators use as inputs into their determinations. Frontier Economics' modelling is therefore constantly exposed to the scrutiny by parties that have a strong vested interest in undermining the regulators' confidence in our modelling and analysis.
27. I assisted the AEMC to undertake a number of regulatory projects, including the reform of network tariff arrangements in the NEM, the review of congestion management arrangements in the NEM and the review of the Snowy region. These two latter projects involved a very detailed technical review of transmission constraints in the Snowy region to understand the economic consequences of these constraints. This work involved the extensive use of Frontier Economics' suite of electricity models. In particular, on behalf of the AEMC, we explored, using our models, the merit of abolishing the Snowy region of the NEM. At the time this was a controversial issue and involved highly detailed modelling attempting to predict the behavioural changes of generators resulting from the abolition of the Snowy region. The AEMC commissioned Professor Richard Green to audit our models to ensure that they were fit-for-purpose.

### **Commercial energy experience**

28. Either as part of an energy reform agenda or as separate projects for government or private sector clients I have undertaken numerous commercial projects involving the development and review of energy trading strategies, the purchase or sale of energy assets and negotiation of new fuel supply agreements (coal and gas) and renegotiation of existing agreements. In Australia I have been involved in the sale or purchase of the majority of power stations transacted over the past 15 years. I have also assisted buyers and sellers of power stations in Asia, Europe, Africa and North America. In all cases this work has involved detailed modelling of the energy markets using Frontier Economics' suite of energy models. When working for sellers the results of this modelling most often ends up in an Information Memoranda that potential buyers rely upon and this work is usually subjected to a high level of scrutiny by potential buyers advisers and financiers.
29. I have also been involved over the years in many power purchase agreement negotiations in Australia and internationally. This work included negotiating with numerous private sector generators contracted to supply the Queensland Government to allow the government to trade power they supplied to the State into the new competitive wholesale market arrangements.
30. In addition to being involved in the sale/purchase of power stations, power purchase agreements and fuel supply contracts I have been involved in the negotiation of smelter electricity supply contracts across the eastern seaboard of Australia since 1997. My experience with these supply contracts includes renegotiating the Gladstone Power Station (**GPS**) electricity supply agreements for over two years on behalf of the

Queensland Government to ensure GPS could operate in the (then) planned NEM. As part of my work for the NSW Government's MIG I dealt with the owners of both the Tomago and Kurri Kurri smelters on numerous occasions as part of attempts to renegotiate existing electricity supply contracts and to secure transmission use of system charge discounts for the smelters. I have also worked on the Portland and Point Henry smelter electricity supply contracts in a range of capacities including advising a bank assisting Alcoa to consider the competitiveness of the electricity supply contract they had with Edison Mission Energy, the owners of the Loy Yang B power station at the time. I also provided advice to LYMMCo on its electricity hedging agreements with the Portland and Point Henry smelters in relation to assessing the carbon cost implications of the agreements.

### **Competition**

31. I have undertaken a number of competition reviews for public and private sector clients over the years, including for the ACCC. As part of the recent work with the NSW Government I prepared a detailed submission to the Government and the ACCC on the potential competition issues surrounding the sale of generation trading rights, retailers and operation of a proposed co-insurance arrangement.
32. I have prepared submissions on numerous occasions for lawyers acting for clients proposing to acquire power companies and also for the ACCC. I have advised the ACCC on an approach for considering the electricity competition benefits of transmission network investment in the NEM and approaches for considering electricity mergers.

### **Other experience**

33. Prior to founding Frontier Economics in 1999, I was the Managing Director of another consultancy firm, London Economics. Prior to being a consultant I was a Principal Economist at the New South Wales Electricity Commission. In this role I was heavily involved in the design of the Australian NEM rules and industry structure.


### **MY REPORT**

34. I have been requested by Ashurst Australia, lawyers for AGL Energy Limited, (**AGL**) to prepare two expert reports in these proceedings.
35. The first report is a report I have prepared on:
  - (a) the design and operation of the National Electricity Market (**NEM**);
  - (b) the role and behaviour of generators and retailers in the NEM; and
  - (c) recent trends in the NEM.
36. Annexed to this affidavit and marked "**DEP-2**" is a copy of that report dated 24 March 2014. I have been assisted in writing this report by Liam Blanckenberg, Simone Wong and Rajat Sood, who are employees of Frontier Economics and hold Honours degrees in economics from the University of Melbourne.
37. The second report is a report I have prepared jointly with Dr Phillip Williams, which addresses matters relating to the impact of AGL's proposed acquisition of Macquarie Generation on competition in relevant markets.
38. Ashurst Australia requested that Dr Phillip Williams and I prepare a report which identifies, in relation to AGL's proposed acquisition of Macquarie Generation:
  - (a) probable counterfactual scenarios to the proposed acquisition;
  - (b) the economic principles relevant to market definition and the markets relevant to determining the effect or likely effect on competition of the proposed acquisition;



- (c) the economic principles relevant to determining the effect or likely effect on competition of "horizontal" and "vertical" mergers or acquisitions;
  - (d) any "horizontal" or "vertical" effects on competition (or likely effects), or efficiencies (or likely efficiencies), arising from the proposed acquisition.
39. Dr Philip Williams has prepared sections 2.2, 4.1, 5.2, 6.2 and 8.1 of that joint report; I have prepared the other sections of that report.
  40. Annexed to this affidavit and marked "DEP-3" is a copy of that joint report dated 26 March 2014.
  41. On 14 March 2014, I was provided with a copy of Practice Note CM7, entitled "Guidelines for Expert Witnesses in Proceedings in the Federal Court of Australia", by AGL's solicitors Ashurst Australia. I confirm that I have read Practice Note CM7 and that I have complied with the terms of Practice Note CM7 in preparing the report.
  42. I have made all the inquiries that I believe are desirable and appropriate for the purpose of preparing the report. No matters of significance that I regard as relevant have, to my knowledge, been withheld from the Court.


Sworn at Melbourne )  
 in the State of Victoria )  
 this 26th day )  
 of March 2014 )



.....

before me:



Name:  ALICE MUHLEBACH  
 Ashurst Australia  
 181 William Street, Melbourne Vic, 3000  
 An Australian legal practitioner within the  
 meaning of the Legal Profession Act 2004

