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Review Secretariat
Department of Environment, Land, Water and Planning
Level 18
1 Spring Street
Melbourne Victoria 3000

By email: energymarket.review@delwp.vic.gov.au

Re: review of electricity and gas retail markets in Victoria

AGL Energy (AGL) notes that the Victorian Government has appointed an independent panel (Panel) and directed them, with support from the Department of Environment, Land, Water and Planning (DELWP), to review retail energy markets in Victoria. Consequently, AGL welcomes this opportunity to comment on the *Review of electricity and gas retail markets in Victoria: Discussion Paper* (Discussion Paper).

AGL is a significant retailer of energy, providing energy solutions to around 3.7 million customers throughout eastern Australia. AGL is also one of Australia's leading integrated energy companies. Our diverse power generation portfolio includes base, peaking and intermediate generation plants, spread across traditional generation fuel sources as well as renewable sources.

AGL strongly believes that since the deregulation of retail prices in 2009, Victorian energy markets have become highly competitive and provided Victorian consumers with the most efficient outcomes through:

- customer choice of energy retailer;
- more innovative product choices and range of price offers;
- allowing customers to access retail market offers at prices well below the average cost of energy supply; and
- providing extensive support through hardship programs for customers in financial difficulty and additional initiatives for other vulnerable customer groups.

In this submission we provide more detail on these positive outcomes.

In saying that, there are small segments of the populace that may not be accessing the full benefits of the competitive energy market and AGL hopes this review can help clarify market-wide solutions to these concerns.

However, AGL is not supportive of any sweeping regulatory intervention that may produce significant negative impacts for a far larger number of Victorian consumers.

AGL believes policymakers can address any identified issues through:

- improving consumers' ability to respond to price signals;
- removing any remaining barrier to market participation;
- ensuring the market is operating with greater transparency to allow customers to make best possible choices; and

- ensuring the benefits of cost reflective pricing are unlocked. Cost reflective pricing along with innovation will deliver opportunities for new products and tariffs for consumers.

Although the Victorian energy markets is highly competitive, it will continue to evolve due to technological change and the ability of customers to choose how and when they produce, use, store, and trade energy. These developments continue to exert competitive pressure on licenced energy retailers to respond in terms of price and innovation in product and service offerings.

AGL appreciates this opportunity to submit on these issues and is happy to meet with the Panel and the Victorian Government to discuss in more detail and provide additional confidential data as required.

Should you have any questions in relation to this submission, please contact me on (07) 3023 2426.

Yours sincerely

[redacted]

Patrick Whish-Wilson
A/Head of Energy Market Regulations

Discussion Paper Questions:

Competition and the long term interests of consumers

1(a). Has the introduction of competition to electricity and gas retail markets in Victoria delivered improved efficiency and benefits in the long term interests of consumers? Please explain the reasons for your response.

1(b) If not, what measures or alternative model(s) would you suggest for the efficient and effective delivery of electricity and gas in the long term interests of Victorian consumers? Please explain the reasons for your response.

2. How much have retail charges paid by consumers increased? What are the reasons for retail charge increases and does this demonstrate that the markets are not operating in the interests of consumers? Please provide detailed evidence to support your response.

As noted in the Discussion Paper, competition is introduced in any industry to introduce rivalry and incentivise businesses to "win" by:

- putting downward pressure on costs to improve efficiency and competitiveness;
- providing better service to meet customer needs; and
- develop products or innovation that out it ahead of its rivals.

This equally applies in the energy industry and competition in the Victorian gas and electricity retail markets developing quickly since deregulation of retail prices in 2009.

Criticisms levelled at the Victorian retail market point at high Standing Offers prices, the large retail cost component contained within these and that competition is not working if all customers do not benefit.

However, the nature and development of the competitive market in Victoria is both unremarkable and highly appropriate when you consider an industry framework where:

- almost half the costs of supplying energy are a direct pass-through of regulated network costs;
- the wholesale input costs of energy, especially regarding electricity, are determined by one of the most volatile markets in the world; and
- the retail cost component, where a retailer is able to differentiate its price offering and compete, remains a small part of the cost stack.

The AEMC has highlighted that Victorians can achieve high level discounts of around 30 per cent by simply moving from a standing offer to a market offer. This can represent household savings of up to $383 each year off the median standing offer. An analysis of such a market offer highlights that Victorian customers can access retail prices well below the average cost of energy supply that is likely to apply under a uniform price or without competition. AGL's customer data suggests that around half the customers in Victoria are accessing a high level of discount.

The total efficiency and welfare benefits provided by competition in the Victorian energy markets is impossible to identify because there is no alternative model, with the same input cost changes, to point to over this period. However, basic economics informs us that the likelihood of a different model such as a single monopoly utility provider or regulated market would have resulted in similar productivity and efficiency gains, the level of product variation or improved service innovation over the long-term is almost nil.

Market structure and regulation

3. Are there any features of market structure or regulation that inhibit the market from delivering outcomes in the best interests of consumers?

Although competition is delivering benefits to most consumers, there are elements of the market structure and regulatory framework that either restrict certain customer groups from accessing benefits of competition or have a general negative impact on competitive outcomes.

Some examples of noted structural or framework issues include:

- the regulatory framework not being able to provide embedded network customers (ie. such as caravan parks) access to retail competition; and
- the structure of electricity network tariffs, and consequently retail prices, continue to be predominantly based on anytime throughput. This has created large cross-subsidy issues as the charges for customers with high peak demand for energy or those who can access solar and minimise their total consumption are not cost-reflective.

Government policy changes such as the introduction and amendment of solar feed-in-tariffs have also influenced retail electricity prices as the uptake of solar has increased significantly across the Victorian community. Decisions such as those announced on 28 February 2017 to increase the solar Feed-in-Tariff (FiT) to 11.3c/kWh are ultimately funded by the entire residential customer base. The growing uptake of new technologies and the funding of such subsidies through electricity bills, will only lead to higher retail costs over time. AGL recommends that the Panel consider the distributional impacts of these policies and their funding, to ensure market transformation is sustainable and is not increasing inequality across Victorian energy consumers.

Another significant impost on energy markets which can increase costs to consumers is excess or inconsistent regulation across the various jurisdictional energy markets. This either drives up retail costs in these jurisdictions or restricts retailers entering the market.

Economies of scale are important for lowering cost to serve in most retailers given the large fixed costs inherent in retail systems. Any significant regulatory variations between jurisdictions can and does prevent retailers' accessing other competitive markets due to the additional cost and this can prevent them taking advantage of scale across the NEM.

AGL acknowledge that the Victorian Government harmonised the Victorian Retail Code with the National Energy Consumer Framework (NECF) back in 2014 to minimise its differences. However, while the two frameworks are now harmonised, the Victorian Government is increasingly changing its regulatory framework independently of the NECF which itself will undergo variations. For example, the ESC's current Payment Difficulties framework that will require retailers to run different hardship processes in Victoria compared to NECF and the introduction of additional solar FiT structures.

The more regulatory variations in Victoria compared with NECF, the more likely it is to drive up retailers' costs to comply.

AGL has also highlighted the importance of focussing on the removal of barriers to participation for some customer segments. While this review is not specifically focussed on the impact of solar uptake across the customer base – the reality is that customers living in rental properties and particularly those participating on hardship programs, to date have been largely unable to participate in a market of new energy products which require significant upfront cost or changes to the building fabric.

These barriers are several-fold – for low-income households or those in financial distress, the available capital to upgrade a property with solar, batteries or efficient hot water systems is not available. For customers living in rental properties, they are often unable to make changes to the building fabric due to the ongoing split incentive 'landlord/tenant' barrier. A Whole of Government approach to reform could consider the impacts of tenancy law on the operation of the retail and new energy market. Short-term leases and limited rights for tenants for example, only compound the issue of barriers to investment in these properties. Similarly, the introduction of minimum standards or disclosure of energy ratings at the point of sale or lease could be phased in over time to ensure that inefficient housing stock in time, would be upgraded to reduce high energy consumption and bills for vulnerable customers.

In Victoria, in the 12 months to August 2016, AGL's Staying Connected customers consumed around 27% more grid-connected electricity when compared to the average customer base. We are already seeing the well documented 'death spiral' effect emerging in several markets - where customers who are unable to make energy saving changes are subject to carrying an increasing proportion of system-wide costs.

AGL recommends that the review panel consider these implications in its deliberations as the current policy framework in Victoria does not target high consumption, vulnerable households participating on retailer hardship programs, despite significant evidence that they would benefit the most from policy intervention.

Pricing, costs and margins

> *4. What factors need to be considered by the review when conducting an analysis of retail charges and margins?*
>
> *5. To the extent that analyses of retail pricing and/or margins indicate a trend of increasing retail charges and/or margins, what are the explanations for this? Please provide evidence to support your claims.*
>
> *6. Please provide any other information or evidence you consider may help the review to accurately assess retail charges and margins or pricing outcomes for consumers.*

The Discussion Paper correctly identifies the cost categories for supplying electricity and gas, namely:

- Network costs;
- Wholesale electricity and/or gas supply costs;
- Environmental scheme costs; and
- Retail business costs.

However, AGL believes that any analysis conducted in the review should carefully consider the complexities involved in these cost categories, the multiple businesses models used by retailers and the various ways retailers manage their wholesale risk if they are to avoid the simplistic conclusions that recent consultants' reports have made.

Firstly, the many special reports on retail prices and margins in Victoria have generally focused on the Standing Offer tariffs, despite the ESC previously reporting that in Victoria, only 11 per cent of customers are on Standing Offer tariffs. All other customers have moved to market contracts with discounts ranging from 0-30% off the Standing Offer rates that have been publicly analysed. These analyses are not representative and should take account of the most competitive discounts available with market offers. In Victoria, the level of discounts varies from time to time but currently, AGL has offers of up to 32% off the usage rates for electricity and 18% for gas.

Second, estimating a reasonable energy wholesale cost is complex because of the various methods used by retailers to procure energy and to mitigate the significant risks created by volatile wholesale markets. Reports using long-term historic averages or perfect hindsight to estimate an average retailer's optimal hedging cost are nonsensical.

Energy retailers are faced with procuring the lowest energy cost for an estimated quantity of consumption (that for electricity varies on a half-hourly basis) in future years based on forecasts of highly volatile spot markets, predictions on often constrained, forward contract markets whilst remaining within the risk parameters of their company. Wholesale market risks for both electricity and gas have been increasing and management of these risks is a fundamental driver of a retailers' ability to compete in the long-term.

Thirdly, retailers' operating models vary considerably, including in scale and scope. However, the obligations are broader than simply billing customers and include additional activities such as:

- implementing Federal and State Governments' policy schemes,
- IT costs;
- Customer acquisition costs through various sales channels;
- Credit and bad debt risk for the total bill, including the network component;
- Assisting customers on hardship;
- setting disputes with customers and the Ombudsman;
- implementing Government concessions; and
- complying with Energy efficiency schemes (VEET).

AGL publishes its cost to serve and cost to acquire and to retain relating to its retail business in its Financial Results released to the Australian Stock Exchange. However, such costs do not include other indirect costs. AGL centrally manages many expenses, including information technology, to maximise operational efficiencies, minimise costs and optimise service levels across business divisions. While these costs would not be incurred but for the existence of the business units, they have not been formally reallocated because the management of these costs is the responsibility of various corporate functions. These centrally managed expenses will need to be allocated to the retail business as well.

In relation to retail margins, regulators like IPART and QCA have applied benchmark margins. It is AGL's view that assigning a benchmark margin for wholesale electricity is misguided. The wholesale electricity market is the most volatile market in the world with a possible price range from -$1,000 per MWh to $14,000 per MWh within hours. Similarly, in the wholesale gas market, managing physical supply at reasonable prices is also very challenging in a tight supply market.

Investor expectations are also a significant consideration if a retail business is to have continued access to capital to invest. Benchmark margins set by regulators do not reflect investor expectations accurately.

In AGL's view, in a market where competition is effective, it is not relevant to assess retail charges and margins. Retail charges and margins will vary for many reasons including operating models, organisational structures, range of services, risk management approaches, economies of scale, accounting treatment and investor expectations.

For instance, in 2013, when AGL announced the acquisition of the publicly listed Australian Power & Gas Limited (APG), it was disclosed that APG's cost to serve was higher than AGL's by almost $132 per account.

In AGL's view, regardless of the operating models, organisation structures and hedging approaches, what is important is that retail competition is working effectively and provides customers which a range of service offers from many retailers. In a highly competitive market, retailers who set prices too high will lose market share.

In an environment with significant underlying cost pressures, it is particularly important to ensure strong retail competition. Regulatory intervention will only create uncertainty and further market risks.

7. *Which costs have been introduced or significantly increased as a result of the introduction of retail competition? How much cost has retail competition added to the electricity and gas supply chains?*

8. *What cost reductions and other benefits to consumers have resulted from the introduction of retail competition? Are there characteristics of the electricity and gas retail markets or supply chains that inhibit retail competition from delivering cost reductions or significant other benefits to consumers?*

There are several retailer costs that have increased because of retail competition, including marketing costs and other customer acquisition and retention costs. With the introduction of retail competition, energy retailers had to invest in marketing their presence and developing channels on their own or through agency arrangements to reach out to customers.

As mentioned previously, AGL publishes in its Financial Results, cost to grow which includes the costs related to acquiring and retaining customers. These costs include sales channel and campaign costs, advertising, and investment in digital and customer experience enhancement. The cost to acquire a customer is significantly higher than the cost to retain. For 2014-15, AGL had reported an average cost to acquire of $156 and an average cost to retain of $31 per account. However, these costs will vary depending on the sales channel mix.

These costs should reduce with increased usage of digital channels to acquire customers however, to date, this has not been AGL's experience with the operating of unregulated, commercial comparators.

The Discussion Paper also queries replication of system costs and erosions of economies of scale but AGL would highlight that:

- where the replication of retail systems is a cost impediment then the competitive market provides alternatives as it has in retail energy markets with external system providers often servicing more than one retailer; and
- economies of scale are important but economic theory and indeed, practical experience in energy and other markets, tells us the scale benefits of a single service

provider are outweighed over time by the productivity losses and inefficiencies of a monopoly provider.

In contrast, the cost reductions and benefits to consumers are outlined throughout this submission. The introduction of retail competition has provided customers with a choice of retailers and alternative ways of paying for their energy service. Competing retailers provide a range of offers and customers who shop around can obtain significant savings compared to standard contract rates but also to the average cost of supply that would apply if a single average replaced competition.

Retailers are also providing an increasing range of services and innovation in energy products. Examples of AGL's increased range of services are providing in more detail in response to Question 12.

9.	*Why do prices remain so dispersed in Victorian electricity and gas markets? Does price dispersion indicate that some consumers are not obtaining the price benefits of competition? Why or why not?*

Pricing dispersion is unremarkable in economics and is considered both economically efficient and welfare enhancing in industries with large fixed and sunk costs (for example airlines, telecommunications, and energy).

However, when monopoly industries are first restructured and then deregulated, the prices commence a natural drift from a regulated 'average cost' uniform tariff to competitive differential prices and this can be controversial. The deep discounted offers are welcomed but the high Standing Offer tariffs are not. But as markets become more competitive, differential pricing increases as competition intensifies and will produce positive welfare effects.

AGL initiated research[1] which examined the range of energy prices in Victoria with the semi-deregulated Southeast Queensland market (prior to deregulation on 1 July 2016). It contrasted the range of retail prices with modelled estimates of industry average total cost and the marginal cost of retail supply. By focusing on the range of products rather than just Standing Offers, the analysis revealed that:

- the Standing Offer rates in Victoria are unambiguously higher than Queensland. Based on the modelling, they were about 10 per cent above the average total cost of supply while in Queensland, the regulated Standing Offer tariffs were slightly below the average total cost of supply;
- however, the discounted offers in Victoria were supplied at marginal cost with no retail margin and were 20 per cent below the average total cost of supply. This contrasts sharply with Queensland where even the discounted products incorporated a 6.7 per cent profit margin; and
- almost 50 per cent of Victorian households accessed 'high-level' discounts (i.e. 15-30 per cent). In contrast only 22 per cent of Queensland customers accessed 'medium-level' (i.e. 6-14 per cent) discounts and there were no high-level discounts available.

Under economic theory, total welfare is maximised when the marginal good produced (the next good, not necessarily all of them) is sold at marginal cost. The characteristics of energy prices in the Victorian market therefore better meets the definition of efficient pricing than those in the Queensland electricity market.

The results did come with the caveat that customers are segmented cleanly and per their elasticity of demand, with household income being the relevant variable in this instance.

Critics of price dispersion often argue that it is unfair that some customers pay higher prices but the key findings of this analysis were that:

- policymakers should not be concerned with Standing Offer tariffs set at rates 10 per cent above industry average total cost if other households then get to access high-level (i.e. 15-30 per cent) discounts at marginal cost; and

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[1] Simshauser, Paul, Whish-Wilson, Patrick, "Price discrimination in Australia's retail electricity markets: An Analysis of Victoria & Southeast Queensland", Energy Economics (2016), DOI: 10.1016/j.eneco.2016.12.016

- price discrimination of this kind is known to distribute a firm's cost recovery from less-price sensitive customer segments to more-price sensitive customer segments, and is therefore efficient because the former are usually high-income households.

The analysis of the Victorian market did reveal an inefficiency arising because of price dispersion and the level of Standing Offer tariffs. The analysis of 530,000 household electricity accounts of a Tier 1 retailer in Victoria revealed a misallocation problem. Specifically, 26,000 households (4.9% of total customers) were concession customers but remained on a Standing Offer tariff – a tariff demonstrably designed for inelastic household customers. Although there is already an obligation to shift vulnerable households who are on payment difficulties to the best available tariff, AGL recognised that concession card holders on Standing Offers could benefit from a product intervention.

Since the underlying cause was primarily information asymmetry, expanding customer communication and visibility of comparator websites is necessary and can be further improved to provide clear, comparable information. However, AGL determined the most appropriate approach in the short term was to shift these misallocated households *en-masse* to an automatic 10 per cent discounted product.

AGL supports the need for all retailers to ensure vulnerable customers benefit from heavy market discounts and avoid high Standing Offer rates to ensure that these customers are no worse-off than under an average cost regime.

10. When do consumers end up on standing offers or higher priced (typically undiscounted) market offers? What happens to consumers at the end of their contract period?

Customers on standing offers have either never entered the market or have moved into new premises and not signed up for a market contract despite being contacted by their retailer.

In the early stages of energy markets competition when markets were semi-deregulated and discounts were low, retailers may have returned customers to the regulated price at the end of the contract period. AGL does not believe this practice is used to day.

AGL can confirm that at the end of the contract period, AGL's customers are sent a letter which informs them that they will be automatically rolled over onto a new plan if they take no action. This plan will either be the continuation of their current benefit or the current AGL discounted market offer at that point in time. The 'continuing offer' letter is the main recontracting letter and it goes to most customers.

Customers are also told that they have the option of choosing a different plan but they are certainly not rolled over onto standing offers. Copies of these customer communications are in Attachment 2.

AGL implemented these new letters around 18 months ago after extensive customer research. Previously, AGL's communications highlighted the customer's old and new prices but the research highlighted strongly that customers didn't want to know what they were on, just what AGL was offering going forward. That is why no mention of discount differences appears in the new communication.

The latest survey[2] of customers by Energy Consumers Australia suggests that 40% of Victorian consumers did not switch or consider switching in the last three years (up 2%). This is the lowest amongst all states. As a corollary to this, the survey also highlighted that Victorian household consumers were now more likely to say they did not consider switching because they were satisfied with the deal they have now.

It would be encouraging to think that this is because of the improved contracting practices of energy retailers.

[2] Energy Consumers Australia, "Energy Consumer Sentiment Survey" September 2016

11.	*What factors influence the level of fixed charges imposed by retailers? What are the implications of fixed charges for consumer outcomes?*

Fixed charges generally reflect the pass through of fixed network charges, the recovery of the fixed components of retail operating costs, and, possibly, return on investment.

While a low energy user will find that fixed charges make up a large proportion of the bill, it does reflect to cost of providing the service to the customers. If this cost is not recovered fully, it must be recovered from other users, resulting in a cross-subsidy.

Fixed charges are part of a tariff structure and are designed to be cost reflective. Given that a very large proportion of the supply chain for electricity and gas are fixed assets, the current proportion of fixed charges across most retail energy markets, and even in Victoria, could be considered below an appropriate cost-reflective level.

12.	*What product or service innovation has been introduced by Victorian electricity retailers? Are there any barriers preventing the entry of new, innovative energy business models or products and services in Victoria?*

Customers respond differently to various price and non-price offerings. Consequently, price competition in the form of discounts (as well as credits and vouchers) is the main feature of retail product offerings in Victoria but other product and service features are used to enhance the value of the energy offer. AGL's suite of products incorporate features such as:

- loyalty schemes (Flybuys);
- access to AGL Energy Online which allow customers to organise their move, view and monitor energy usage and bill details, pay bills and update personal details;
- access to My AGL IQ® which is an advanced energy report tool which allows customers to track their energy usage (up to the previous day's consumption for customers with digital meters), compare with similar homes and set energy saving goals;
- membership with AGL Rewards® which offers AGL products and services and benefits from over 1,600 merchants nationally, and
- monthly billing and bill smoothing.

AGL has continued to improve its customer service offering by introducing 24/7 anytime contact centres, webchat, payment via PayPal and a card for impromptu payments.

In relation to innovation, customer engagement with AGL through online, mobile applications and social media continues to grow. Customers can sign up online or through traditional channels. AGL introduced 24/7 customer service and webchat in 2014 and currently has more than 1 million digital billing accounts. In 2015, AGL released a mobile app which allows customers to view energy consumption and billing information, and to pay their bills. This is in addition to AGL's online energy monitoring tool, My AGL IQ, which was launched in 2013. In 2016, AGL announced a $300 million Customer Experience Transformation Program which will enable simpler, faster and more flexible customer experience through digital devices.

AGL has historically launched many of its most innovative products in Victoria as for some time, Victoria was the only jurisdiction with no retail price regulation in the NEM. Another important reason is the rollout of digital (smart) meters in Victoria which enables the development of products such as "Free Power Saturdays" which utilises the half hourly usage data. Other new offers such as 'one month's worth of electricity free' are not dependent on digital meters.

AGL's standard suite of offers now include AGL Fixed where rates are fixed for two years.

Aside from a suite of general offers, AGL has also developed offers which are targeted at certain segments such as families (Free Power Saturdays), seniors and communities or based on lifestyles such as customers with pool pumps.

In 2015, AGL established a New Energy division, with a dedicated focus on distributed energy services and solutions. This enables AGL to offer customers 'beyond the meter' energy solutions, new and emerging technologies including energy storage, electric vehicles, solar PV systems, digital meters through our ring-fenced subsidiary business Active Stream.

New Energy are actively working with customers and in partnership with network businesses to develop a network services capability involving load management and demand response solutions.

With other retailers launching similar offerings, market competition has expanded beyond traditional energy plans. The distributed solar PV and energy storage resources is a growing market, and the development of interconnected bi-directional home energy management systems, with customers making choices about how and when they produce, use, store, and trade energy with each other based on dynamic market signals. Within local micro-grids, community solar and storage resources may be shared or traded using peer-to-peer platforms. As a result, there is increasing presence and activity of alternative energy sellers in the market and this is expected to continue to exert competitive pressure on licenced energy retailers to respond in terms of price and innovation in product and service offerings.

AGL has offered or is trialling products and services enabled by digital technologies including:

Solar Smart Plan: A solar power purchase agreement (PPA) product, which has been refined and improved during 2016. Under this plan, customers buy their power from a solar system which is installed on their roof and owned and maintained by AGL. The customer pays for the energy produced by the solar system at less than average grid energy prices for the term of the agreement, and at the end of the term (usually seven years), customers are given the option to take ownership of the system and the energy it generates.

AGL 'Solar Command: Provides customers with a personalised online dashboard with near real time information on the performance of their rooftop solar system and inverter unit to maximise the value of their solar system. It allows customers via the AGL mobile App to obtain:

- Expected daily solar production versus actual production;
- Information on whether the system is performing to its potential based on system size, arrangement, configuration, and shading profile; and
- recommendations on when to use more solar-produced electricity e.g. pool pump or air conditioning while solar production curve is higher than consumption.

Electric vehicles (EVs): In June 2016 AGL announced a new "all you can eat" capped energy plan that will enable EV drivers to charge their vehicle at home as much as they want for $1 per day (including carbon offsetting). Building on from the pilot program commenced in 2015, AGL is also continuing to develop EV products for corporate fleets. Our bundled offering is a complete and tailored solution for EVs including needs assessment, charging, procurement options, energy supply, reporting and certification. AGL will continue to scale our business customer offering through 2017 in line with new EV model launches.

Digital metering: AGL has prioritised providing energy efficiency solutions to many of our customers, and has focused significant efforts on providing customers with the enabling technology to be able to manage their energy usage efficiently, for example, through the entry of AGL's wholly-owned subsidiary, Active Stream, into the contestable digital metering market. Active Stream offers a range of innovative digital metering products and services to retailers, distributors and other businesses, including the installation and maintenance of digital metering devices (on the retailer's behalf) and provision of metering data to the customer's retailer, and the relevant network operator and AEMO for billing and settlement.

AGL Mobile App: The AGL Energy mobile app enables customers with a digital meter to gain greater control over their energy usage. Customers can see usage and usage charges on a daily, weekly, monthly and yearly basis enabling them to identify usage trends and see a projection of their next bill. There is also the ability to set an alert when overall spend for the billing period reaches a specified amount plus customers can pay bills from the app using their credit card.

AGL's Virtual Power Plant (VPP): AGL is currently in the process of selling and installing 1,000 batteries in residential homes and businesses across metropolitan Adelaide. These batteries will be remotely connected and managed, to provide 5 MW of peaking capacity and offer customers the opportunity to save on their energy bills. Customers signing up to the trial receive a digital meter. This is to allow the monitoring and verification of data on the network. However, the Network support services and the orchestration of the VPP will be delivered through sophisticated cloud based solutions and VPP infrastructure platform.

Consumer awareness, understanding and engagement

13. *What are the key drivers of active consumer participation in retail energy markets? What barriers prevent consumers, or certain groups of consumers (including vulnerable consumers), from engaging in the market and/or selecting a product that best meets their needs?*

AGL's analysis of a sample of Victorian customers shows that the proportion of customers on standing offers who have concession cards is the same as the proportion of customers overall who have concession cards. What this infers is that customers with concession cards are no more likely to be on standing offers than the general population.

For customers who are not concession card holders and are unengaged, it is likely that the cost of energy is not a prevalent issue.

The AEMC competition review clearly highlights that there are no barriers to entry for consumers in Victoria. However, competition requires retailers to actively compete but it also requires consumers to be engaged.

AGL has been an active participant in trying to improve engagement for specific consumer groups through its outreach programme.

Throughout 2015 and 2016, AGL has increased the level of community engagement and outreach to disadvantaged communities. This engagement has occurred at two levels by:

- upskilling and supporting community workers and volunteers who may be assisting customers with energy issues through 'Train the trainer' sessions. These sessions have been held across Victoria with St Vincent de Paul Society in Box Hill, Gippsland and Ballarat;
- participation in 'Bring Your Bill' days hosted by community organisations and Ombudsmen.

AGL representatives have attended these sessions providing basic information to support improved engagement with the market and connections with available support such as concessions, retailer hardship programs and energy saving tips and hints.

AGL has also collaboratively developed an unbranded Energy Information Guide with St Vincent de Paul Society, which has been distributed across the organisation to assist volunteers provide information to customers during home visits and info sessions.

AGL also highlights its commitment to customer engagement was shown by its $500,000 contribution last year to the Queensland Government 'Switched on Communities' program run through QCOSS to empower and equip Queensland community organisations to undertake outreach, information and awareness sessions for vulnerable communities. These sessions aimed to raise awareness about deregulation, competition, energy offers in the market and where to go for additional assistance.

AGL contends that this sort of collective community engagement across government, industry bodies, retailers and community groups is an important way to disseminate information to customers and empower them to engage with the market and receive the support available if they are unable to pay. This raises the question, if vulnerable and disadvantaged groups are already sufficiently being actively engaged through this sort of outreach then if other customers choose to not engage in the energy market, is this a market failure? Or is there a need for more focussed collaborative engagement strategies across all sectors?

14. *Does the requirement on retailers to offer standing offer contracts lead to poor outcomes for consumers, or groups of consumers such as vulnerable consumers? If so, why?*

AGL notes that an AEMC report indicated that some customers on (higher priced) standing offer contracts are often older or living in regional areas. AGL's data on standing offers does not show any bias towards concession customers but as highlighted above, AGL recognises that some vulnerable customers may not have engaged with the market and remain on standing offers, despite the heavily discounted market offers available.

As highlighted above, in July 2015 AGL announced an automatic 10 per cent discount off usage charges for concession card customers in Victoria who remained on standing offers. This automatic discount ensures customers enjoy the savings of the discount, while still retaining the same terms and conditions of the standing offer.

AGL would also highlight its own research[3] which showed that most financial counsellors (those assisting customers) have previously not been recommending customers switch to a market offer or were unaware of the difference between market offers and standing offers. This may explain why vulnerable customers may still be on standing offers and while AGL stresses that this research was undertaken several few years ago, may suggest that there could be benefit in greater focus on outreach and awareness activities amongst community organisations about the benefits of discounted market contracts.

Extensive support is already being provided to vulnerable customers with payment difficulties. Customers experiencing financial difficulties and who cannot meet the costs of their energy needs are provided a range of short and longer-term support. This may include deferrals and flexible payment arrangements.

For customers who need extra support, protection from disconnection is available for customers who remain engaged on AGL's hardship program *Staying Connected*.

Additional support available through Staying Connected may include:

- Flexible payment plans having regard to a customer's capacity to pay;
- Where consent is provided switching to the best available rate;
- Home energy visits where appropriate;
- Referral to financial counsellors; and
- Debt relief and incentive/matching payments on a case by case basis.

In addition to this programme, AGL has undertaken extensive consultation with community organisations around the country, meeting with 35 community organisations seeking feedback on ways to improve support for vulnerable customers.

In 2014, AGL announced an Affordability Initiative which included $6.5 million of support program improvements including: $3.3 million debt relief, matching payments, $1.2 million increased funding for financial counselling services, and $1.5 million in energy savings partnerships, including a $1 million partnership with the NSW Government to install solar in the homes of AGL hardship customers living in community housing properties.

AGL also notes the change in its approach to the marketing of retail energy offers in 2015, where all marketed discounts from this point onwards would apply as a discount of the published standing offer price. In the same series of enhancements, AGL also supported the proposal from St Vincent de Paul Society for retailers to publish standing offers on the same day to provide greater comparability across the market.

15. What implications does discounting raise for consumer outcomes, including consumers' ability to compare offers and for retail competition more generally?

Discounting is a simple way of communicating the price proposition to customers. It is difficult and likely to be more confusing to customers, to refer to specific tariffs as there are a large number of residential tariffs such as, in electricity:

- Domestic General – with a fixed daily supply charge and either a single usage rate or multiple block rates;
- Controlled loads;
- Time of use rates – weekend saver;
- Flexible pricing with peak, shoulder and off-peak rates, and potentially seasonal rates; and
- Demand based or cost-reflective tariffs.

In addition, for gas customers there are seasonal prices.

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[3] Nelson, Tim, Reid, Cameron, "Reconciling Electricity Prices and Social Policy", The Energy Journal (2014), Volume 27, Issue 1, http://dx.doi.org/10.1016/j.tej.2013.12.007

These tariffs are usually structured to reflect the network tariffs which are designed to be cost reflective and to provide price signals to consumers to modify their consumption pattern so that network infrastructure can be better utilized and to minimise current and future costs.

In Victoria, a customer's retail price also differ according to their location as there are five electricity distribution network regions and 12 gas distribution network sub-regions, each with different network price levels and/or structures. This further complicates the use of any mass marketing using actual retail price charges rather than discounting. Examining a Gazettal of retailers' Standing Offer prices will highlight this complexity.

Discounting has been highly successful in promoting customer engagement. AGL's own market research from 2014/15 indicated that out of a list of attributes considered the most important in any energy product, the availability of a discount was considered to be the most attractive attribute to consumers.

In general, discounting allows customers to assess market offers from their existing retailer and competing retailers. The market products offer real discounts compared with the standard contract price.

It should be noted that not all retailers market in this way.

AGL has furthermore made a series of enhancements to its offers to improve clarity and transparency after community advocates had recommended that AGL's products and services could be more clearly marketed. AGL made also made a series of other enhancements including:

- the introduction of AGL Fixed, a truly fixed product where rates are locked in for the contract term. All other references to the word 'fixed' were removed from materials (except where required by regulation) to be more transparent with customers;
- Removal of early termination fees on all new retail plans from March 2015; and
- As mentioned above, public support for the policy recommendation of gazetting standing offers on the same day, with all advertised discounts for AGL offers transparently applied only to the standing offer published prices, to provide greater clarity for customers.

Restraints on competition

16. *Are there any features of Victoria's retail electricity and gas markets that restrain competition from delivering benefits to consumers?*
17. *Are there any issues that have not been considered in this discussion paper that you consider should be considered during the review?*

There is no question that the Victorian retail electricity and gas markets are highly competitive with the:

- highest level of customer churn;
- greatest number energy retailers; and
- most products and energy offers;

in the NEM.

Even though customer churn may reduce as retailers focus on retaining customers through better service and pricing offerings, underlying competition is increasing because of:

- new business models/ participants (eg, exempt sellers) bypassing regulatory framework to offer energy management products; and
- alternative channels, such as on line brokers, who are using digital technology to make it easier/ simpler for customers to understand market offers and make more informed decisions.

AGL does believes that there is a role for increased regulation to monitor the performance of on-line brokers to ensure there is clear disclosure of remuneration and consistency in information provision to maintain trust in the sector and facilitate consumer engagement.

AGL also notes the Discussion Paper raises the question on whether vertical integration in energy markets has any impact on competition.

Vertical integration in the energy industry has previously been queried by regulators to consider if it adversely impacted the 'balance of competition' by reducing forward market liquidity and constraining generation entry. This was found to be erroneous.

An AGL research paper[4] examined the theoretical evidence on vertical integration as well as empirical evidence in the NEM and found that:

- vertical arrangements only occur in response to market problems and are usually welfare enhancing; and
- forward market liquidity in the NEM does not reveal any evidence of market thinning, despite the occurrence of many vertical arrangements.

The paper examined vertical integration in an energy-only market by the performance of an energy retailer under alternative business combinations with unambiguous results demonstrating that:

- vertical integration produces greater earnings stability and predictability so a Vertical Retailer is a more efficient business with lower overall costs;
- separate merchant retail or generation businesses, while profitable overall, cannot sustain investment-grade credit metrics throughout the period and cannot facilitate the entry of new power plant capacity – thermal or renewable and
- only the vertical firm could satisfy investment-grade credit metrics over the long run and therefore be able to invest in power generation in an energy-only market such as the NEM.

Regarding issues that have not been specifically considered in the Discussion Paper, AGL believes the Review should consider the wholesale electricity and gas markets with recent events putting significant upward pressure on retail prices.

Any comprehensive assessment of the competitive retail market and price changes must include a review of wholesale market conditions.

18. Are there examples of other retail electricity and gas markets that deliver strong outcomes to all consumers? What are the key characteristics of these markets, their regulatory frameworks, and/or examples of policy initiatives implemented that have helped improve consumer outcomes?

The Australian gas and electricity markets have closely followed the blueprint established by the establishment and deregulation of the UK energy market.

In a similar situation to this Review, Ofgem, Britain's energy regulator, was concerned that price dispersion could not be explained by variations in cost and decided to implement regulations to eliminate differential prices and to simplify energy products by limiting the number of energy retailer tariffs as well as limiting permissible tariff structures.

Independent British economists such as Professors Yarrow, Vickers, Green, Littlechild, and Waddams-Price all counselled that Ofgem's regulation would result in:

- low-income customers being considerably worse-off as discounted products evaporated;
- a decline in competition;
- more firm strategic behaviour; and
- energy retailers would make higher profits with no clear benefit to consumers in aggregate.

As they predicted, energy retailers were incentivised to remove competitive tariffs, competition was muted, available discounts contracted, customer poaching slowed, switching rates fell as gains from switching diminished (switching costs remained constant), overall tariff mark-ups

[4] Simshauser, P., Tian, Y. and Whish-Wilson, P. 2015, 'Vertical integration in energy-only markets', *Economic Analysis and Policy,* 48, 35-36.

increased and ultimately, energy retailer profits increased materially with Littlechild[5] reporting that consumer bills increased by over £1 billion as a result.

For Australian energy markets, the AEMC regularly analyse the competition and have found it to be effective and delivering value to consumers in South East Queensland, New South Wales and South Australia as well as Victoria.[6] The AMEC highlight that customers who engage in the deregulated markets can and do make substantial savings on their energy bills.

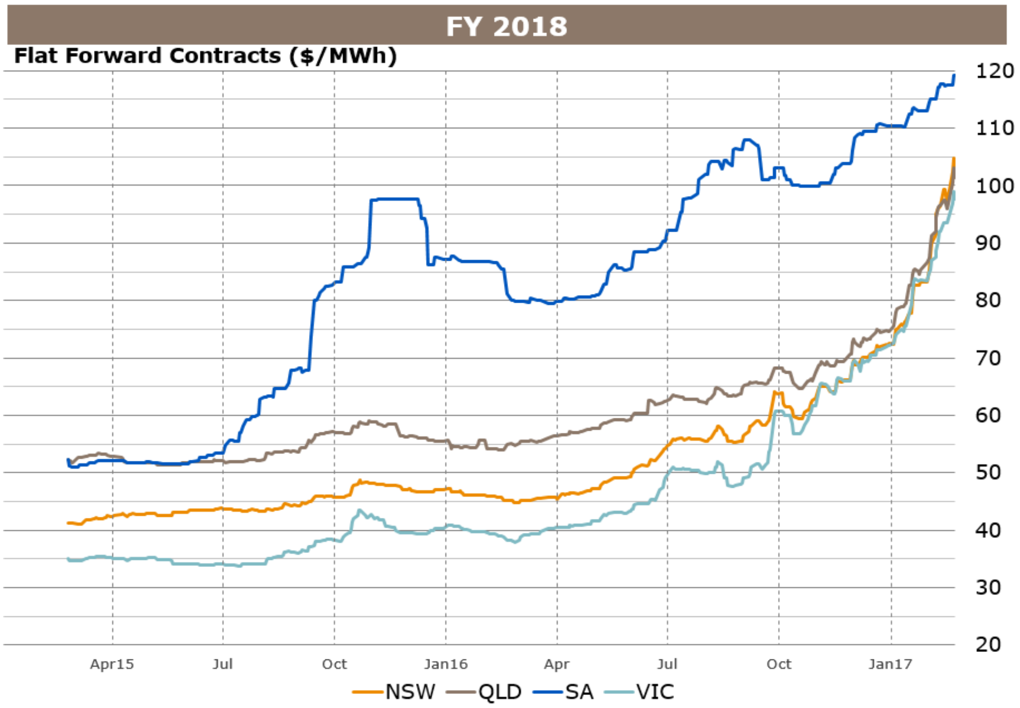
Price increases from Hazelwood closure

19.	*What factors should the review consider in assessing price increases as a result of the expected closure of Hazelwood? What methods should the review consider to determine the likely impact of the Hazelwood closure on wholesale prices and the associated impact on retail prices?*
20.	*What is a reasonable level of expected retail price increase resulting from the closure of Hazelwood? Please provide detailed evidence to support your response.*

Wholesale costs have increased significantly and wholesale electricity costs will increase further after the closure of Hazelwood.

Figure 1 shows how the price of flat forward electricity contracts for the 2018 financial year has changed over the last 12 months in all regions. The rise in contract electricity price is primarily due to the market response to the expected decrease in supply of dispatchable power and consequently, forward contracts. There has been a marked increase in Victoria since the November 2016, when Engie finally announced that "its Hazelwood power generation business in the Latrobe Valley will close at the end of March next year".

Figure 1: Changes to Victorian CY 2018 base futures, ASX



However, the closure of Hazelwood's Engie Power Station is not the only issue that must be taken into consideration when assessing the extent to which its closure will impact Victorian residential electricity customer bills.

Given the fact that Victoria participates in the NEM, the extent of any price increases will be dependent on the supply demand balance – not only in Victoria – but also in other NEM

5 Littlechild, S, (2014), "Promoting or restricting competition?", Regulation of the UK residential electricity market since 2008", EPRG Working Paper No. 1415, University of Cambridge.

6 Australian Energy Market Commission (AEMC), 2016, "2016 Retail Competition Review – Final Report"

jurisdictions, notably South Australia. Specifically, the more that electricity is exported to meet other NEM region requirements, in the short term, will contribute to the uplift in the Victorian wholesale price and subsequently, the Victorian retail customer price.

The NEM is framed on the operation of a competitive market to provide clear signals to investors to add capacity to the market – in response to higher wholesale prices – or remove it from the market (mothball) in response to prices below operating costs. It is therefore likely that any sustained wholesale price increases will deliver clear incentives to market participants to respond in appropriate way.

Ultimately, AGL considers that, in the medium to longer term, the expected price increases may be offset through either increased generation investment in the state, increased interconnection from other regions (noting that interconnection does not provide additional opportunity to contract as it is non-firm), distributed energy resources or increased energy efficiency.

More broadly, the NEM is now experiencing increased volatility, as well as supply disruptions – particularly in South Australia. AGL consider that gas fired generation has a key role to play as the sector transitions away from a supply mix dominated by baseload coal fired capacity. Although it is important to note that, issues such as gas moratoria, or gas reservation, act as an impediment to private sector investment in gas generation assets as new domestic gas supplies are not able to mitigate rising domestic gas prices - making such projects uneconomic.

Additionally, AGL notes that there are now real constraints on the contracting of gas because of the increased national demand – regardless of the price.

Australian governments, policy makers, regulators, and AEMO are now asking whether the current NEM market design is sustainable, or whether amendments to market settings are required to take account of the increased integration of renewable energy. The energy sector now has three clear competing policy objectives to deliver simultaneously, reliable/secure electricity supply – with increased integration of renewable energy capacity, supplied at an affordable price and at low/zero emissions intensity. No energy system in the world is successfully meeting all three objectives. However, gas fired generation capacity could effectively contribute to meeting these. Accordingly, gas market settings, including access to gas pipeline capacity and options to increase gas market transparency, are also being actively investigated.

The Australian Competition and Consumer Commission (ACCC) recently found that domestic gas extraction (CSG) moratoria needed to be lifted (to increase the flow of gas), gas transmission pipeline access arrangements needed to change, and further investigation of domestic gas joint marketing arrangements was also warranted.

Based on market outcomes in the NEM, and in SA specifically, and in response to the need to meet the identified three policy objectives, there is a real opportunity for gas, and gas fired generation capacity specifically, to play a greater role in supporting intermittent renewable energy generation capacity and mitigating risks to reliability and system security. Subject to the availability of gas at an economic price.

Retailers play a key role in the NEM of managing wholesale risk. There are currently significant wholesale issues in energy market which should be looked at and looking at competition alone will not be the answer. Price increases which will likely be a direct result of major changes in the generation of electricity and its impact on the wholesale electricity market, rather than the level of retail competition.

Attachment 1: Samples of AGL Recontracting Letters