Agriculture Industries Energy Taskforce Submission to ACCC discussion paper: Monitoring of Electricity supply in the National Electricity Market

Removing barriers to competitiveness for Australia's agriculture industries

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This submission is provided on behalf of the Agriculture Industries Energy Taskforce: National Irrigators' Council (NIC), NSW Irrigators' Council (NSW IC), Cotton Australia, National Farmers' Federation (NFF), Bundaberg Regional Irrigators Group (BRIG), Central Irrigation Trust (CIT), CANEGROWERS, Winemakers' Federation of Australia (WFA), Queensland Farmers Federation (QFF), Pioneer Valley Water (Qld)

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Executive Summary

The cost of electricity in Australia is putting at risk our agricultural industries' capacity to compete with the world as a provider of food and fibre. In a country with an abundance of renewable and non-renewable sources of energy and whose primary producers are among the world's most efficient, this is an untenable outcome.

Many of Australia's agricultural products (for both domestic and export consumption) use production processes that rely heavily on power, for example, irrigators who pump and pressurise water or producers who process, package or refrigerate products. Australia must have a comparative advantage for those producers - offering reasonably priced power from the grid. Instead, many producers are forced to consider off grid solutions (ie diesel) or face an uncompetitive environment and sometimes, forced out of production.

The agriculture sector has previously raised concerns regarding customers moving off grid, resulting in stranded network assets and leaving remaining grid consumers meeting the cost of high electricity prices (ie death spiral).

The Agriculture Industries Energy Taskforce (the Taskforce) has led a campaign to address the critical industry and market reform necessary to fix the broken regional electricity pricing system in Australia and to ensure that network supplied electricity is a secure and a cost-effective energy source for Australia's food and fibre producers.

Australia's agricultural industries play a significant role as economic drivers in local economies, providing flow on benefits to the national economy. Industries include cotton, rice, sugar, wine, almonds, horticulture and dairy. Energy use across the agriculture sector is variable, dependent upon the industry and the intensification of operations at various times. Energy is used for pumping irrigation water, pasteurisation, cool rooms, processing plants and moving products. Operations that require heating, cooling or irrigation have higher levels of electricity use. Some industries have stable electricity consumption year round, while in others there is seasonal variability.

The high cost of energy for the agriculture sector sits starkly against the backdrop of the excessive profits of regulated electricity and gas businesses.

Over recent years, the Taskforce has provided numerous submissions ***(Attachment A)*** to a range of Government initiated inquiries and AER pricing determinations. Yet despite this significant commitment and contribution highlighting the damage caused to Australia's increasingly efficient agriculture industries, high electricity prices have steadfastly remained, and in many cases increased over those years.

The focus has been on securing critical industry and market reform necessary to fix the broken regional electricity pricing system in Australia and to ensure that network supplied electricity is a cost-effective energy source for the sector.

We have strenuously advocated for an equitable system in the way Australia's electricity network companies calculate their network costs in submissions to the Australian Energy Regulator (AER) during the pricing determinations process. The Taskforce provided a submission to the AER as part of the examination of profitability measures for regulated gas and electricity network businesses in December 2017. ***(Attachment D)*** We recommended through that process that the AER adopt a performance measurement framework to enable an accurate assessment of the profitability of

regulated electricity and gas businesses, comparable to that of other ASX entities and suggested that until that occurred, meaningful and systemic change would not be realised. We commend our submission and recommendations to the ACCC inquiry into retail electricity prices, July 2017. *(**Attachment B**)*

As part of the AER examination of profitability measures, the Taskforce supported the McGrath Nicol scoping study to identify financial performance measures used by some overseas regulators or electricity and gas network businesses, where commonly used financial performance measures that may be relevant when analysing the profitability of the regulated businesses were identified. Broadly, the Taskforce supported those measures that would allow the AER to:

- compare profit of the regulated business to the statutory profit earned by the owner of the regulated business;
- analyse the profits of a regulated business over time;
- compare the profit of a regulated business to the profit earned by other regulated businesses,
- compare the profit of a regulated business to businesses in other industries, including ASX listed companies.

Most recently, the Taskforce commissioned work by Sapere Research Group analysing the rate of return published by the AER. *(**Attachment C**).* The Sapere study found that as a group, networks are making super-normal profits because in the real world they are low risk and consequently have low financing costs, not because they are outperforming. The Taskforce objected to:

- an overinflated value of the Regulated Asset Base with no of optimisation of the asset base – something other sectors including gas have;
- pricing models that treat the industry as if it is high risk rather than a cosy monopoly;
- an industry that thinks that its desire to maximise return is more important than Australia's national interest.

Further detail is provided on the Sapere study on page 7.

Taskforce advocacy has been focused on securing fundamental changes within the NEM and energy related policies that ensure Australia returns to the lower quartile against international comparison with other high income OECD countries. We recommend specifically:

- A 30% reduction in the regulated electricity prices based on the 2014-15 financial year.
- A medium to long term price capped at 8 cents per kilowatt-hour for the electrons (R) and a similar ceiling of 8 cents per kilowatt-hour for the network (N).
- A rule change via the Australian Energy Market Commission (AEMC) to enable the AER to optimise an electricity network's regulated asset base (RAB) similar to the pre-2006 NEM rules that required the regulator to optimise the transmission and distribution network regulated asset base/s.
- A national food and fibre tariff model/s.
- Fundamental reform of the National Electricity Market (NEM) to address the lack of genuine competition, the operation of the contract bidding process and a market where consumers' interests are fairly represented.
- Stability and certainty in national energy policy to allow investment.

Introduction

The Agriculture Industries Energy Taskforce (the Taskforce) welcomes the opportunity to provide comments in response to the ACCC discussion paper regarding the monitoring of electricity supply in the National Electricity Market (NEM).

The Taskforce notes this next phase, or monitoring function, follows the inquiry conducted by the ACCC into Retail Electricity Pricing and the ACCC report titled *Restoring electricity affordability & Australia's competitive advantage,* published in July 2018. The Taskforce provided a submission to the ACCC inquiry into Retail Electricity Pricing in July 2017, and welcomed many of the report's 56 recommendations to address electricity affordability.

While much public focus has been on Government and Labor Opposition energy policies, including the National Energy Guarantee (NEG), meeting Australia's emissions targets and most recently the proposed divestiture laws, we have long sought a focus on the issues that sit outside those policy approaches, specifically the behaviour of the networks. The existing NEM provides ample opportunity to make changes within the current legislative and regulatory framework for Australia's energy markets, putting the spotlight on the actual profits made by the networks.

The ACCC inquiry represents a genuine attempt to address the inequities and the inconsistencies within the regulatory design of Australia's NEM, and the start of the process to reset the NEM which as the ACCC report suggests, has not worked well for consumers. We seek to highlight here the challenges faced by Australia's efficient productive agriculture sector due to the high cost of energy.

The failure of energy policy is compromising Australia's capacity to be a competitive global food producer and to put fresh food on the tables of Australian households. Producers have an opportunity to meet the demand of an ever-increasing global need for clean, green food and fibre, but instead face the risk of industry viability against the reality of high electricity costs. These cost pressures are imposing unrealistic barriers on the sector and driving down Australia's competitive edge.

There are approximately 85,681 farm businesses in Australia, 99 percent of which are Australian owned and operated. Each Australian farmer produces enough food to feed 600 people, 150 at home and 450 overseas. Australian farmers produce almost 93 percent of Australia's daily domestic food supply. [1] With population growth and rising personal income, the emerging middle class in Asia provides the major market for over 60 per cent of Australian agricultural exports.

Australia's farm exports earned the country $44.8 billion in 2016-17, up from $32.5 billion in 2010-11. The value of our farm exports, and indeed the future of Australian agriculture, depends largely on conditions in overseas markets, due to our high level of exports. [2]

Australian farmers export about 77% of what they grow and produce. As a sector that is highly exposed to trade, agriculture must remain competitive in the international market and consequently, reliable, affordable and sustainable electricity supply are a necessary pre-condition for the economic development of agriculture. It is also key to ensuring farmers remain profitable and can efficiently invest in agriculture.

[1] *National Farmers' Federation Farm Facts:* https://www.nff.org.au/farm-facts.html
[2] *National Farmers' Federation Farm Facts:* https://www.nff.org.au/farm-facts.html

Reform of Australia's water resources sector in recent years has resulted in greater competition for water resources. While water savings have been achieved on-farm through investment in infrastructure, the resulting higher use of energy has coincided with a dramatic increase in the cost of electricity. Analyses show that irrigators' and growers' electricity bills have increased in excess of 100% in most cases, and up to 300% for some over the period 2009-2014, mainly due to the rising cost of network charges imposed by the network companies.

Typically, regulated network charges and other costs represent around 50% to 56% of farmers' electricity bills; the actual electricity charges account for around 26%, although this is also changing rapidly. Network charges imposed by the electricity networks continue to have a highly distorting effect on the electricity market. Australian consumers are paying around twice as much for network charges as those in the United Kingdom are around 2.5 times as much as those in the United States.

We recognise the importance of gas supply and its potential role in the electricity grid with the shift away from coal supplied power and the efforts of the federal government to sure up gas supply are acknowledged. The Taskforce also supports the Vertigan Review recommendations around improvements in competition and access for existing pipeline infrastructure.

Under current market governance arrangements, existing loopholes are enabling price gouging by network businesses and preventing a fair and effective pricing structure for consumers.

The experience of Taskforce members to engage various responsible bodies within the NEM to highlight the challenges faced by the agriculture sector, has resulted in significant frustration and cynicism due to the complexity and bureaucracy of the electricity industry. This effort has demonstrated the entrenched culture of institutional and blame shifting with governance and regulation of the industry split between many bodies, where prescriptive rules and processes prevent any positive change. The myriad of regulation is increasingly divorced from reality and unaccountable, built on abstract theoretical ideas that are beyond the reality of the industry and its consumers.

The evidence of excessive industry profit and soaring prices supports our own observations that shareholders are benefiting at the expense of electricity consumers. The owners of the electricity generation, distribution and transmission assets have a dominant voice in driving the policies adopted by the regulatory bodies and take every opportunity to undermine the prospects for energy efficiency and distributed generation, both of which represent competitive threats to their business.

Sapere Research Group was engaged to provide necessary technical input in the development of Taskforce submission to the ACCC inquiry into retail electricity prices. This work confirmed that at every level of the electricity market *'costs, prices and profits across much of the sector, and at multiple points across the supply chain, exceed efficient costs, prices and profits'.*

The Sapere report showed that : *'despite being subject to price/revenue regulation, network costs, profits and prices also appear to be excessive.* And that: *There is evidence of substantial excess network capacity across many parts of the NEM. We have not been able to identify a corresponding reduction in the allowed cost of capital to accompany risk transfer associated with the move to the RAB roll-forward method for setting the RAB at the start of the following price period (replacing the previous method which included provision for asset optimisation). Consequently, it appears that network prices incorporate the double effect of excessive returns on an excessive asset base.'*

The additional work by Sapere Research Group (Oct 2018), commissioned by the Taskforce analysing the rate of return published by the AER, shows that energy networks had collectively earned economic or monopoly profits of $2.6 billion over four years.

Over this period the aggregate actual returns significantly exceed the $21.4 billion allowed or normal returns by more than $2.1 billion or 9.9 percent. Excluding Ausgrid, these economic or monopoly profits rise to more than $2.6 billion or 14.6 percent of normal returns of $18.1 billion.

The Taskforce has been consistently critical of the methodology used to allow network owners to *'exceed efficient costs, prices and* profits' as demonstrated by Sapere in Taskforce submission to the ACCC inquiry (July 2017).

The consideration of the rate of return guideline is fundamental. The rate of return methodology must be changed to ensure a reasonable rate of return to ensure that the 'gold plating' of assets is discontinued, and equity is re-established and delivered in the prices paid by consumers.

The key objective of Australia's energy policy must ensure that:

- Australia's international competitive position is guaranteed
- Equity for consumers is delivered
- Energy policy elements are not considered in isolation
- The entrenched behavioural and systemic problems in the National Electricity Market (NEM) are examined and addressed.

We have previously recommended the AER adopt a performance measurement framework to enable an accurate assessment of the profitability of regulated electricity and gas businesses, comparable to that of other ASX entities. Until that occurs, meaningful and systemic change will not be realised.

We have argued that the current regulatory framework is enabling regulated network businesses to build in unacceptable returns. The AER's lack of a performance measurement framework to understand the extent of the profitability of regulated electricity and gas businesses is enabling a continuation of gold plating.

The AER must move to a benchmarking model comparable to that of other entities. For example, the ACCC currently monitors and publishes information relating to prices, costs, profits and service quality of a range of sectors, including information on industry margins and the rate of return on assets. We support this further work to be undertaken by the ACCC as part of its monitoring role which will focus on data collection, the analysis it undertakes and expectations of market outcomes and participant behaviour against which it will view the monitoring results.

Overseas examples provide some insight into how regulators have the capacity to collect data which appropriately enables the calculation and reporting of profitability measures and to assess the financial performance of electricity and gas businesses compared to the expected returns under the framework applying in that jurisdiction.

In the UK for example, the monitoring of the financial performance of the electricity and gas transmission and distribution businesses through the collection of data, enables a calculation and report on the return on regulated equity and profit per customer. This enables a comparison with the cost of equity to determine whether businesses are outperforming or underperforming.

The New Zealand example provided in the AER discussion paper [3] is also useful. Distribution businesses regulated by the NZ Commerce Commission provide data on asset value and cash flow to enable the calculation of an internal rate of return (IRR). This is compared to expected returns on a nominal estimate of the weighted average costs of capital (WACC).

We know that the regulated asset base (RABs) of Australia's electricity networks have been artificially inflated and inefficiently grown to excessive levels. Over the past fifteen years, the networks' RABs have increased by around 400%. These growth rates now put Australian electricity networks' RAB levels significantly higher than their international counterparts; we know that the RAB per connection levels of Australia's distribution networks have been estimated at up to nine times the levels of networks in the United Kingdom.

In a submission provided to the 2014 Senate inquiry into the performance and management of electricity network companies, the Taskforce raised the issue of network companies misleading the AER in relation to their weighted average cost of capital (WACC). While these issues are complex, we view that regulatory design is the underlying reason for such failures. The determination of the WACC – an issue largely but not completely within the AER's discretion – is based on what the AER calculates to be the WACC of a 'benchmark efficient network service provider'. This calculation is by design, meant to be abstracted from the actual cost of capital of the regulated firms.

There are a range of factors across a failed market that are making Australia less competitive. The very comfortable arrangements for the owners of networks is an issue. It is crucial to Australia's future agricultural competitiveness that the base calculation of the return these owners are allowed to build into their pricing models is fundamentally reformed, to produce a reasonable rate of return to ensure the 'gold plating' of assets no longer continues.

The AER's wholesale market monitoring should be expanded and appropriately funded to include monitoring, analysing and reporting on the contract market. This should include analysing the data reported to the OTC repository (ACCC recommendation 6), ASX data and data gathered directly from generators and retailers (including through the use of compulsory information gathering powers).

The Taskforce supports ACCC report **recommendation 6:** *The NEL should be amended so as to require the reporting of all over-the-counter (OTC) trades to a repository administered by the AER. Reported OTC trades should then be disclosed publicly in a de-identified format that facilitates the dissemination of important market information without unintentionally revealing the parties involved. The requirement should be implemented to align with (or be eligible for) any OTC reporting requirements under the NEG. The AER, AEMC and AEMO should have access to the underlying contract information, including the identity of trading partners.*

The Taskforce also supports ACCC report **recommendation 42**: *The COAG Energy Council should adopt all the suggested increased penalties to all civil penalty provisions listed in the consultation paper as a matter of priority, but instead of increasing the amount to $1 million as proposed, increases should be to the same levels as parliament is currently considering for the ACL ($10 million, three times the benefit gained or 10 per cent of turnover). The civil penalties suggested for increase to the maximum level across the NEL, NER, NERL and NERR relate to provisions listed in the consultation paper, such as:*

- *information required for projected assessment of system adequacy*

[3] *AER discussion paper: Profitability measures for electricity and gas network businesses, November 2017*

- *limitations on generators' technical parameters—requirements only apply in certain circumstances*
- *key requirements that generators must meet, regardless of the circumstances of their plant*
- *the requirement to advise AEMO if a situation changes, and keep AEMO continuously informed*
- *obligations with respect to life support customers*
- *wrongful disconnection by a retailer or network service provider*
- *requirement to implement hardship policy*
- *explicit informed consent requirements for certain transactions*

It is not suggested that the task of fixing Australia's energy challenges is straight forward. Over a long period, we have provided numerous recommendations that would fit within the scope of the existing market, industry and policy structures. It is acknowledged that to seek more ambitious change would be challenging and would represent a broader commitment by all players – governments, industry, regulators, policy makers and consumers to undertake such wide reaching changes.

The sector however, will continue to advocate for outcomes that deliver equity for all consumers, restore Australia's competitive advantage and restore community confidence in a broken system. While there has been incremental change, this is not resulting in the system wide change necessary to deliver fair electricity prices. It is hoped that a focus on an analytical framework for monitoring, looking at a market failure framework, a legal framework and a distributional or equity framework will provide the appropriate backdrop for a comprehensive examination of market outcomes and participant behaviour.

Terms of reference

We note the matters to be monitored and taken into consideration under the terms of reference include but are not limited to:

i)	Electricity prices faced by customers in the NEM including both the level and spread of price offers, analysing how wholesale prices are influencing retail prices and whether any wholesale cost savings are being passed through to retail customers.
ii)	Wholesale market prices including the contributing factors to these such as input costs, bidding behaviour and any other relevant factors.
iii)	The profits made by electricity generators and retailers and the factors that have contributed to these.
iv)	Contract market liquidity, including assessing whether vertically integrated electricity supplies are restricting competition and new entry, and
v)	The effects of policy changes in the NEM, including those resulting from recommendations by the ACCC in its Retail Electricity Pricing inquiry report of July 2018.

Response to questions

The ACCC seeks views on:

1. The appropriate analytical framework/s for the ACCC's monitoring activities, including
    a. What frameworks are most relevant to the electricity market
    b. How the ACCC should incorporate these overarching frameworks into its monitoring activities.

Response: The Taskforce supports a transparent and strengthened analytical framework for monitoring the NEM against a set of expectations of market outcomes and participant behaviour, to prevent and manage poor behaviour by networks.

The three identified potential aspects of an analytical framework outlined in the discussion paper are supported, and appear to be most relevant to the inquiry's monitoring activities, that is:

- A market failure framework
- A legal framework
- A distributional or equity framework.

However, we do query why these functions have not previously been embedded as part of an analytical framework for monitoring, particularly the monitoring of legal and regulatory compliance.

As recommended in previous submissions, the AER must be afforded greater powers through the NEL *(ACCC, report recommendation 3)* to be enabled to address behaviour '*which has the effect of manipulating the proper functioning of the wholesale market, together with the necessary investigation powers and appropriate remedies'.*

In submissions to the AER on profitability measures, we recommended the AER adopt a performance measurement framework to enable an accurate assessment of the profitability of regulated electricity and gas businesses, comparable to that of other ASX entities. We included further detail on the suggested approach to undertake this work. *(Submission to the AER on profitability measures, Dec 2017)* (***Attachment D***)

With regard to how the ACCC should incorporate these overarching frameworks into its monitoring activities, the Taskforce has no specific further comment.

2. Current overlapping and inconsistent methodologies to market monitoring, and suggestions for preferred approaches.

Response: A critical question. We note that the approach suggested by the ACCC does not measure the performance of individual networks but electricity prices can differ significantly between networks within the state. In that regard, we support the observations made by the National Farmers' Federation (NFF) in their submission on this aspect: *'a breakdown of retail prices by energy networks themselves could be a useful way to examine competition (and potential competition issues) where a high spread indicates healthy competition and a low spread indicates otherwise. In regional areas, this could highlight that retailers make little effort in discounting, but may also highlight that other factors may be driving regional electricity prices.'*

3. Which retail price data collected and reported on in the REPI (ACCC Retail Price Inquiry) was insightful and should be produced on an ongoing basis as part of the monitoring function?
4. Is there retail price data not reported on in the REPI that would be useful to understanding how well the retail market is functioning?
5. Are there different approaches to the analysis of the REPI or other data that would be more useful than the analysis reported in REPI?

Response: The Taskforce notes and supports ACCC commentary regarding retail price monitoring, suggesting a consistent, NEM-wide approach to reporting on:

1. retail electricity prices
2. retail revenues, costs and profits, undertaken periodically, to help monitor the effectiveness of competition
3. wholesale market competitiveness, including reporting on new investment in generation capacity, ownership of capacity and output. This work should assist in monitoring the effectiveness of the NEG
4. analysis of the contract market, including analysing the data reported to the repository (as recommended in chapter 5 [4]) ASX data and data gathered directly from retailers and generators.

The Taskforce would support greater transparency, by way of a central repository, as suggested in the ACCC report, chapter 5.3.5: *electricity market participants being required to publish hedge contract information on a freely accessible website (https://www.electricitycontract.co.nz/) within five business days of entering into each contract. The website (would) record the contract type, quantity of electricity, price, region to which the contract relates, and a number of other statistics.*

Broadly the Taskforce supports ACCC **Recommendation 6:** *The NEL should be amended so as to require the reporting of all OTC trades to a repository administered by the AER. Reported OTC trades should then be disclosed publicly in a de-identified format that facilitates the dissemination of important market information without unintentionally revealing the parties involved. The requirement should be implemented to align with (or be eligible for) any OTC reporting requirements under the NEG.*

The AER, AEMC and AEMO should have access to the underlying contract information, including the identity of trading partners.

Also supported is **recommendation 40:** *Retail price monitoring should be streamlined, strengthened and appropriately funded to ensure greater transparency in the market, reduced costs, and allow governments to more effectively respond to emerging market issues. This should be done by:*

- *COAG Energy Council agreeing to streamline price monitoring and reporting to the AER and the AER receiving all the necessary powers to obtain information from retailers*
- *COAG Energy Council agreeing to extend price reporting for retail electricity services to small to medium business customers*
- *state governments agreeing to close their own price reporting and monitoring schemes in favour of an expanded and strengthened NEM-wide regime*

[4] *ACCC final report, Chapter 5.3.5: The need for greater transparency of the OTC market*

A NEM-wide price reporting and monitoring framework be implemented which includes a combination of price monitoring with full EBITDA data (including standardised costs to serve, attract and retain consumers, and margins), and consumer expenditure surveys. This reporting should be done on a regular basis and include customer expenditure data, based on representative customer surveys and retailer billing and offer data, and be reflective of demographic information.

6. The best way to measure the relationship between wholesale and retail prices over time, including:
    a. How wholesale prices affect retail prices and the ways in which this can be measures
    b. What types of monitoring or analysis would best reveal the relationship between wholesale and retail prices
7. What types of data are necessary to undertake this analysis.

Response: The Taskforce has no specific comment.

8. Analysis of the wholesale market that the ACCC could produce to complement the existing work of other agencies monitoring wholesale prices.

Response: The Taskforce has no specific comment in response to ACCC activity that might complement the existing work of other agencies monitoring wholesale prices. However, we draw on our comments previously provided regarding wholesale market liquidity *(ref Taskforce submission to ACCC inquiry into retail electricity prices)* ***(Attachment B).***

A key concern for any expanding retailer is the liquidity of forward hedge markets. Wholesale hedges reduce uncertainty over future wholesale purchase prices for retailers. Hedges may take a variety of forms, including swaps, options and caps.

The requirement to put in place a forward hedge portfolio arises in part due to the likelihood that customer acquisition costs will be capitalised and then recouped over a number of years. A three year amortisation period is not untypical. In this case, a retailer will need to hedge some portion of its forecast sales for three or more years into the future.

The requirement to hedge also arises because of the need to minimise the cost of credit guarantees. An expanding retailer is likely to need to procure a larger credit guarantee. This is because prudential settings scale with customer numbers and sales volumes.

Under AEMO prudential settings, the size of the credit guarantees required may be reduced by way of offsetting bilateral and other hedge arrangements registered with AEMO – known as reallocations. In retailer interviews for the 2014 AEMC retail competition review, retailers noted that limited forward electricity wholesale market liquidity represented a barrier to expansion. One retailer interviewed expressed concern the duration was too short, the product mix was problematic and the minimum transaction level too high.[5]

A key challenge for a non-vertically integrated retailer is obtaining sufficient forward hedges (such as caps) to protect against extreme wholesale market price volatility for the entire duration of the period required to recoup the cost of customer acquisition (say three years), at a competitive price. Caps

[5] *See K Lowe and Farrier Swier Consulting, Op. Cit., page 35.*

may be available for part of this period, but not for the full period. If caps are not available for the latter half of the period, then the retailer is exposed to the risk that the cost of caps substantially increases relative to the cost assumed when offering three year pricing contracts.

This risk may be managed in part by changing retail prices, as is allowed under multi-year retail contracts. There is, however, a risk a price rise may result in customers switching away before amortisation of customer acquisition is complete.

A retailer's portfolio of forward hedges needs to be formed so that it matches the retailer's forecast aggregate demand profile for each half hourly trading interval for each wholesale market region (or fuel) it is retailing in. To the extent there are mismatches between the hedge portfolio and the actual consumption of its customers in any given trading period, the retailer is exposed to wholesale spot price risk.

In the NEM, this risk is greatest during spikes in wholesale prices. These price spikes are strongly correlated with demand spikes leading to generation congestion, as well as transmission congestion limiting transfers from other regions.[6] So during such an event, a retailer is likely to be both increasing its quantity of wholesale spot purchases and potentially being liable for substantially higher prices for each unit.

If a retailer has insufficient hedges in place, it will be exposed to spot prices. The outcome may be that actual wholesale purchase costs are substantially higher than assumed in the ITP for a given customer segment on which contracted retail prices were set.

In this case, the retailer would be selling energy for less than it cost to the retailer, and the retailer could make substantial financial losses on these sales. These losses may not be recoverable from customers and hence would need to be recovered from shareholder funds. The risk of such losses, and inability to hedge perfectly, is one of the reasons prudent retailers require a mark-up (margin) over their cost of sales and own costs.

This may be illustrated by reference to an extreme weather event. While the average wholesale price for NSW for the whole of 2017-17 was $81.22/MWh, the price may be 400 times this amount during price spikes. Price spikes are strongly correlated with high coincident system demand. Average small customer demand profiles are notable for being strongly associated with peak system demand and price spikes.

During an extreme heatwave in NSW and Queensland on 10 February 2017, wholesale prices went to $12, 221/MWh in Queensland and to $14,000/MWh in NSW.[7]

Price spikes and the more "peaky" demand profile of small customers mean that a mass market retailer's exposure to spot market prices is significantly leveraged. If a retailer acquires 10,000 new customers with an average annual demand of 6MWh, its annual liability for energy is in the order of $2,400,000 (volume times an historical average spot price of say $40/MWh) or $6,700 per day. However, as price spikes may contribute about a third of the average price, the retailer may be liable

6 *See Implications of extreme weather for the Australian National Electricity Market: historical analysis and heatwave scenario by Sapere, dated August 2014.*

7 *See page 5, Electricity spot prices above $5,000/MWh, New South Wales & Queensland, 19 February 2017, published by the AER on 5 May 2017.*

to $200,000-400,000 for these customers in a single afternoon. This could be sufficient to breach the AEMO Maximum Credit Limit.

If a retailer has acquired significant new customers over a period before a major price spike event, this could trigger a substantial increase in the retailer's prudential requirement with the AEMO. A similar outcome is also possible due to a steep increase in wholesale prices, as occurred in 2007/08 as a result of extended drought constraining generation output.

The Rules permit AEMO to change a participant's prudential settings at any time with one day's business notice. Any changes that result from the prudential settings require the retailer to increase its credit support by no later than 11am on the effective date. If the retailer fails to provide this increased support by the relevant time, this constitutes a default event.

The risk of being exposed to a default, together with limitations around the liquidity of forward hedge cover against price spikes, are likely to represent significant barriers to expansion for smaller retailers. This barrier could apply even to vertically integrated retailers with substantial generation, due to the likelihood of network congestion during the periods when exposure to spot prices is likely to be most significant.

Similar observations apply to gas, albeit gas market volatility is much lower than electricity. Integrated energy companies operating gas generation and with significant upstream gas investments may have a significant competitive advantage in sourcing competitive wholesale gas supplies. This is even more so, where companies are able to manage a portfolio of sales, with winter gas sold for heating and summer gas used for peaking generation. Such a portfolio would significantly reduce average upstream and transmission costs compared with a gas only retailer. This partly explains why there are no gas only retailers outside Tasmania.

A key advantage for major retailers with well-matched generation portfolios is they are less likely to be exposed to liquidity shortfalls. In effect, a vertically integrated internal retailer holds an option over the portion of future related party generation capacity that has not already been committed to external retailers.

This opens the opportunity for integrated generators to act strategically in considering how far into the future to offer forward wholesale contracts to external retailers. The incentive for acting strategically is limited if competition in retail markets is effective and retail margins are no more than as is required for retailers to recover their costs.

This may, however, change under conditions where retail markets are not effectively competitive and supra-normal margins are available. Under these conditions, it could be profit maximising for the related party generator to favour the internal retailer. Even if the internal retailer pays the same average hedge price as external retailers, the internal retailer could be advantaged in other ways, including by way of a long forward duration, or a load shape that more closely matches the relevant demand profile. Relatively small differentials in duration and/or half hourly profile may create a significant cost advantage for the internal retailer, once risk and uncertainty are taken into account.

9. Analysis of retailer and generator profitability. In the case of wholesale profitability, what analysis could the ACCC produce to complement existing work monitoring generators or retailers?

Response: The Taskforce offers no specific comment. Refer response to Question 8.

10. What methodology should the ACCC use in its approach to monitoring hedge contract markets? Are there specific metrics or pieces of information that are not currently reported that would be informative for market participants and policy makers? What types of data or information would be most valuable, and who should they be sought from?

Comment: In relation to specific methodology the ACCC might use in its approach to monitoring hedge contract markets, the Taskforce has no comment regarding specific methodology. However we commend our comments in Section 4.2.3 of the Taskforce submission to the ACCC inquiry at ***Attachment B.***

Broadly, agriculture users of electricity are forced to operate in a market environment that lacks genuine competition and appears dominated by generators and transmission and distribution infrastructure owners who aim to maximise returns. The absence of competition results in gaming on a spot market that is challenged with the transition to renewables. There is no equity in consumers being forced onto the spot market due to an inability to secure quotes from retailers for fixed term contracts.

In May 2017, the ACCC granted authorisation for a group of businesses, led by the South Australian Chamber of Mines and Energy (SACOME), to collectively bargain with retailers for electricity. The group including five of the original of 22 members, have signed up to the eight-year deal. The contract will begin in 2019. The ACCC authorised SACOME members to go to market to negotiate for a new electricity supplier.

Amendments to the Competition and Consumer Act (CCA) are providing for greater flexibility to the collective bargaining approval process for small business. We continue to support efforts by the ACCC to grant broader exemptions to groups wishing to collectively bargain for electricity.

11. The value of the types of contract market measurements reported on in REPI, and which, if any of these measurements should be prioritised to be monitored on an ongoing basis.

Response: The Taskforce has no specific comment.

12. How an efficient electricity market can be expected to operate.
13. What specific measurements or thresholds of market outcomes or participant behaviour should be used in the ACCC's electricity market monitoring?

Response: Question 12 is a broad question, however we strongly support greater scrutiny of participant behaviour. We have consistently argued for an examination of the way network companies present information to the AER during the electricity reset determinations process. This is critical in being able to set appropriate regulatory allowances. The arrangement adopted in the National Electricity Market (NEM) known as the 'propose-respond' model sees network businesses submitting their business proposals and the regulator responding to the proposals. The regulator may wish to

accept the proposals, though if proposals are rejected by the regulator, the onus is on the regulator to explain why.

This model was advocated by network businesses and adopted by the Australian Energy Market Commission (AEMC) and formalized in the National Electricity Rules. Prior to these rules, under the economic regulation performed by the ACCC (for transmission networks) and state regulators (for distribution networks), the regulators determined the information requirements and businesses responded to the regulator's requests. While the networks also submitted their intentions and proposals, there was no obligation on the regulators to respond to these proposals.

With the onus of proof on the regulator under the 'propose-respond' model, network businesses are afforded an unfair advantage. During the 2010 regulatory decision, demand growth was significantly over estimated by Queensland companies and recently acknowledged by them during the December 2014 forum where it was stated that they realised after proposals were submitted that the suggested demand would not expand as they had advised the AER it would.

While the AER has the capacity to ask questions and seek further information from network businesses, it does not set the agenda. We submit that a change of process is needed with the AER setting the agenda and the onus of proof being placed on network businesses to respond to the regulator's questions.

A further issue previously raised by the Taskforce was the need for a rule change around the five-minute settlement rule where pricing was set at every five minutes, yet financial settlement is made every thirty minutes. On 28 November 2017 the AEMC made a final rule to change the settlement period for the electricity spot price from 30 minutes to five minutes, starting in 2021. Five minute settlement provides a better price signal for investment in fast response technologies, such as batteries, new generation gas peaker plants and demand response.

14. What policy issues are likely to impact on the functioning of the electricity market and should therefore be a focus of monitoring by the ACCC?
15. What methodological approaches could be undertaken by the ACCC in monitoring the impact of particular policy developments?

Response: In response to question 14, we recommend a rule change via the Australian Energy Market Commission (AEMC) to enable the AER to optimise an electricity network's regulated asset base (RAB) similar to the pre-2006 NEM rules that required the regulator to optimise the transmission and distribution network regulated asset base/s.

As suggested earlier in this submission, we know that the regulated asset base (RABs) of Australia's electricity networks have been artificially inflated and inefficiently grown to excessive levels.

The WACC/RAB Inconsistency: The AER's methodology for determining the networks' 'return on capital' allowances does not appropriately consider the impacts of RAB indexation:

- The AER's methodology for estimating the required percentage returns (for both equity and debt) is based on the returns that investors require on their actual capital investments.
- However, the AER calculates its 'return on capital' allowances by multiplying those percentage returns to artificially inflated capital bases.

This inconsistent approach, together with the AER's incorrect gearing assumptions, is resulting in the AER providing 'return on capital' allowances well above the required levels – eg it is currently resulting in the AER providing 'return on equity' allowances to Powerlink, for example, of around four times the required level.

The Taskforce has suggested a comprehensive assessment of the economy-wide costs and benefits of revising the electricity network and transmission businesses' RABs to efficient levels, to deliver real cost reductions to consumers.

There have been countless studies into the drivers of recent electricity cost increases and most of these studies have concluded that the RAB and the Weighted Average Cost of Capital (WACC) have been a driving force behind these increases.

Given the current value of the electricity distribution and transmission businesses' RAB, electricity costs will remain high *unless* there is a fundamental shift in the way the RAB is set and calculated into the future (i.e. reduced to more sustainable levels).

A further issue and in response to question 14, a survey[8] prepared for Energy Consumers Australia (ECA) and conducted by the Institute for Sustainable Futures (UTS) which included NSW Irrigators' Council, Cotton Australia and Queensland Farmers' Federation, examined the benefits of regionally embedded generation. As expected, responses in the survey demonstrated the benefits of switching to more energy efficient equipment and on-farm renewable energy. However, findings also showed that grid connection process can be challenging for consumers, and irrigation farmers have experienced difficulty connecting renewable energy to the distribution network. This is a matter that warrants close monitoring by the ACCC.

16. The proposed reporting schedule and how it may affect your business.
17. Other similar reporting requirements your business is subject to, and the degree to which the ACCC's monitoring activities could align with those requirements (or information could be shared between agencies to minimise duplicative requests).
18. Whether particular measurements are likely to be more suitable for the March or September report, given the time of year those measurements are typically produced by your business, and the time required to finalise and collate that information.
19. Factors that may impact the proposed schedule of information requests and reports, such as other regulatory obligations at similar times.

Response: No further comment on 16-19.

20. For information that needs to be requested from market participants, whether any information can be effectively captured via voluntary requests.
21. Any relevant issues regarding the timing of reporting such as the value of certain information being available at certain times of year.

Response: As suggested in Taskforce submission to the ACCC inquiry into retail electricity pricing, the ACCC could exercise its information gathering powers to institute a regular scheme for monitoring of the efficiency of retail electricity markets that deliver:

[8] *Irrigators – the flow on benefits of regionally embedded generation: prepared for Energy Consumers Australia (ECA): Institute for Sustainable Futures (UTS): Nov 2018*

- *improved transparency for customers regarding electricity offers and pricing*, and
- *increased information about competition, pricing and other practices in the supply chain that may improve customer experiences in buying electricity services*.

Data requests for retailers: We provide some proposals on how the ACCC might most effectively exercise its information gathering powers for the purpose of independently assessing the efficient costs of retail supply in accordance with best practice retail price methodology.[9] With access to retailer customer and cost data that has not been available since the removal of economic price regulation in the major retail electricity markets, the ACCC has an opportunity to make substantial improvements to previous analyses of retailer profits and costs.[10] In particular, the ACCC has the opportunity to compare costs and prices and to distinguish between price diversity and price dispersion.

The data to be requested from retailers to support this analysis includes, for each network tariff and retail tariff, for each defined reporting period:

- total retail revenue
- total sales volume
- total customer numbers
- total billing days (assists normalise for entering/exiting customers)
- total network costs
- 'meta-data' identifying the network tariff and key characteristics (structure, rates), retail tariff(s) and key characteristics (structure, rates)

The acquired data is then applied to a number of simple calculations to derive: actual unit prices paid (inclusive and exclusive of the fixed component); average consumption per customer, and average cost per customer for each unit of analysis.

A significant feature of the form of this request is that it does not require any modification of retailers' existing customer information systems (CIS). The central function of retailer revenue systems is to link metering data for each NMI/customer to the relevant retail tariffs in order to calculate customer bills, and verify obligations under the corresponding network tariff. Indeed, for internal retailer reporting purposes, these revenue systems should be capable of reporting revenue and other key data for many methods of segmenting their customer bases. This will be done, for example, to monitor customer segments at risk of being bad debtors or for targeted marketing.

The ACCC has the choice whether to ask retailers for the corresponding data for other elements of the costs stack, for example wholesale, environment and market costs, or to adopt accepted methods of estimating these costs.

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[9] *AEMC 2013, Advice on best practice retail price methodology, Final Report, 27 September 2013, Sydney*

[10] *Wood, T., Blowers, D., and Moran, G. (2017). Price shock: is the retail electricity market failing consumers?. Grattan Institute; Simon Orme, James Swansson, Quantification of excess costs in QCA draft electricity retail price determination for 2016-17, CANEGROWERS, 30 May 2016; St Vincent de Paul Society & Alviss Consulting, The National Energy Market – Still winging it, Observations from the Vinnies' Tariff-Tracking Project, St Vincent de Paul Society, Melbourne, September 2015; Carbon and Energy Markets, A critique of the Victorian retail electricity market. A report for the Brotherhood of St Laurence, June 2015; Carbon and Energy Markets, Australia's retail electricity markets: who is serving whom? A report prepared for GetUp!, August 2016; Essential Services Commission, Victoria, Electricity Retail Margins Discussion Paper. May 2013*