



## **Australian Energy Market Commission**

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07 July 2014

Competition Policy Review Secretariat  
The Treasury  
Langton Crescent  
PARKES ACT 2600

**By email:**     [www.competitionpolicyreview.gov.au](http://www.competitionpolicyreview.gov.au)

Dear Mr Harper,

### **Competition Policy Review Issues paper**

The Australian Energy Market Commission (AEMC) welcomes the opportunity to respond to the Competition Policy Review Panel's Issues Paper.

The AEMC is the rule maker and developer for Australian energy markets. This includes making rules in relation to the National electricity market (NEM); transmission and distribution networks; wholesale gas markets and natural gas pipelines. From 2012, our rule making expanded to include the retail sale of energy to consumers. In addition, we also provide strategic advice to the COAG Energy Council (the Council) and undertake market reviews on request by the Council.

Energy markets in the Eastern States are generally characterised by competitive wholesale and retail markets. This is due in large part to a history of successful structural and institutional reform that created the framework for competition to develop. The new governance arrangements, implemented in 2005, have created an effective and transparent framework for implementing reform to energy markets. Our current work program, which we discuss in section 2 of this submission, is addressing key areas where energy markets require further refinement to deliver efficient outcomes. In this regard, the ability of the existing energy market institutional arrangements to adapt to changes in the sector has proven to be robust.

One area of potential concern, however, is the impact of non-energy related policies on the energy sector. For example, some climate change policies are having a significant impact on price signals and the efficient allocation of risk within the sector.<sup>1</sup> These impacts highlight the importance of ensuring that the design and implementation of policies with different or conflicting objectives to those operating in the energy sector are effectively reconciled, so that all objectives can be met in

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<sup>1</sup> For a more detailed discussion on this issue, see the AEMC's submission to the *Review of the Renewable Energy Target* at <http://retreview.dpmc.gov.au>

a sustainable way. We consider that the institutional bodies involved in the development of energy markets could perform a useful role in the early phases of policy design, to ensure they are sustainably integrated in a manner that minimises the overall costs to consumers over the long term.

In regard to more specific competition related matters, we are generally of the view that current competition policy and legal frameworks are working effectively to manage competitive energy markets.<sup>2</sup> While energy markets have undergone a period of structural change since market start, we are confident the flexible 'merits based' approach to mergers embodied by the Competition and Consumer Act 2010 (Cwth) (CCA) provides the best means of managing such structural change. This is particularly so in the context of energy markets which are subject to a rapid pace of evolution.

That said, we acknowledge the fundamental importance of getting the initial market structure right. A sufficient level of divestment needs to take place both horizontally and vertically for competition to develop. We provide some historical background in this submission to the structural reform process that led to the development of the NEM for the Panel's consideration. There are some important lessons in this process.

Finally, while we are generally supportive of the current competition policy framework, we consider one aspect of competition policy needs further attention, and this relates to the certification process under Part IIIA of the CCA. The Productivity Commission's final recommendations in relation to certification have not fully addressed our concerns in this regard.<sup>3</sup> We discuss this issue further in Section 4 of the submission.

The structure of this submission is as follows:

- (i) Section 1: provides a brief overview of the energy market reform process and the process leading up to our current institutional arrangements;
- (ii) Section 2: discusses key aspects of our work program;
- (iii) Section 3: sets out our views on the existing competition policy framework in an energy market context; and
- (iv) Section 4: discusses our concerns in relation the Productivity Commission proposals for certification.

If you have any questions or require further information please contact Paul Smith, Chief Executive Officer, on (02) 8296 7800.

Yours sincerely,

John Pierce  
Chairman

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<sup>2</sup> The AEMC does not have a formal role in any aspect of administering the Competition and Consumer Act 2010

<sup>3</sup> Access regimes that are certified are immune to declaration under Part IIIA of the CCA. Under the Australian Energy Market Agreement 2006 State and Territory governments committed to seek certification of their energy access regimes. However, to date they have not done so, largely due to the very small perceived risk of declaration given the detailed energy specific access regimes.

# 1. History of the National Electricity Market

## 1.1 Structural evolution

The electricity sector was characterised by vertically integrated government owned monopolies in the early 1990s. The process to structurally reform the electricity sector began in 1991 with a decision by the Special Premiers' Conference (now the Council of Australian Governments or COAG) to establish a National Grid Management Council (NGMC) to coordinate the planning, operation and development of a competitive electricity market<sup>4</sup>.

COAG took this decision in response to a report tabled in 1991 by the Industry Commission which found that potentially significant increases in Australia's productivity could be achieved by:

- a restructuring of the electricity supply industry with the vertical separation of generation and retail from the natural monopoly elements of transmission and distribution (with these elements remaining subject to regulation);
- the introduction of competition into generation and retail and providing access to the transmission and distribution systems on a non-discriminatory basis;
- progressively selling publicly owned electricity generation, transmission and distribution assets to the private sector; and
- the enhancement and extension of the interconnected systems of New South Wales, ACT, Victoria, and South Australia to eventually include, when economically viable, the power systems of Queensland and Tasmania.

At a fundamental level these reforms were introduced to bring market incentives, price discovery and more efficient risk allocation to the generation and retail sectors to spur productivity enhancements.

The jurisdictions were responsible for undertaking these reforms separately in each state. As well as the vertical separation aspects, jurisdictions also corporatised their electricity businesses and established independent regulatory agencies responsible for the economic regulation of the sector.

A key lesson from the reform process was the importance of disaggregating retail and generation into sufficiently small components for competition to be effective. For example, in Victoria the old electricity generation monopoly was broken up into many separate operating units.<sup>5</sup> While there have been differences in the level of disaggregation in generation assets between states and the degree of privatisation, the reform experience to date has seen the development of a diverse and competitive electricity generation and retail sector, with significant investment and new entry occurring in the competitive sectors since the start of the market.

At the heart of the structural reform process was creation of a new wholesale market in electricity,<sup>6</sup> where generators could offer their supply into the market on a competitive basis and retailers could purchase energy on behalf of their customers. The wholesale electricity market conceptual design was signed off by the State premiers in 1995. The NGMC subsequently performed a key role in

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<sup>4</sup> For a more detailed discussion on genesis and evolution of the NEM see KPMG, *National Electricity Market, A case study in successful micro-economic reform*, 2013 available on AEMC's website at [www.aemc.gov.au](http://www.aemc.gov.au)

<sup>5</sup> *Ibid*, p 46

<sup>6</sup> The NEM operates as a sealed bid multi-round auction, with dispatch of generators based on the prices offered in ten different price bands. A central process (coordinated by AEMO) stacks generator offers from cheapest to most expensive to meet demand on a 5 by 5 minute basis. The most expensive generator required to meet the last increment in demand sets the price for that 5 minute period. While generators are dispatched on the basis of a 5 minute price the market price they receive is a time weighted average of 6 5 minute intervals.

undertaking simulation modelling and testing of key features of the design, and performing a number of 'paper trial' runs, before the wholesale markets in each eastern state commenced operation 1998. Wholesale markets in each of the states were gradually interlinked with other states through investment in interconnection, to support competition and trade across state boundaries.

Another important lesson from this process was that significant consultation, review and testing in respect of key aspects of the market design was fundamental to ongoing engagement of stakeholders and providing them with the necessary confidence to support the introduction of the NEM.<sup>7</sup>

In 1996 the participating jurisdictions agreed to pass the National Electricity Law, which provided the legal basis for the restructured electricity industry, including a National Electricity Code (the Code) which set out the rules for operating and participating in the market. A third party access framework for distribution and transmission was also introduced.

### *Retail competition*

Prior to the commencement of the market reforms for electricity, small consumers had no choice regarding their preferred energy retail supplier. All consumers were supplied from the incumbent retailer for their region. Reforms to these arrangements began with the introduction of full retail contestability, whereby new retailers were permitted to enter the market and compete with the incumbent supplier. This generally occurred in a staged fashion, with larger customers being able to choose their energy supplier before residential and small business customers. All NEM jurisdictions have now introduced full retail contestability for all consumers.

The next phase of reform has been to gradually remove retail price regulation. Price regulation, in the form a default regulated tariff, was maintained in all states as an additional protection for consumers following full retail contestability on the basis that it would take some time for competition to develop. Consequently jurisdictions agreed to phase out retail price regulation where effective retail competition could be demonstrated.<sup>8</sup>

The pace of deregulation since implementation of full retail contestability has varied across the NEM. Victoria has had full retail contestability for both electricity and gas consumers since 2002 and prices in that market have been set by retailers since 2009. South Australia deregulated its prices early in 2013, New South Wales in June 2014 and Queensland has indicated it will remove price regulation by the middle of 2015. In contrast, Tasmania and the Australian Capital Territory have not yet indicated when they will remove price caps in their jurisdictions.

Overall, the continued progress in price deregulation indicates that reforms have been working to promote effective competition for consumers. Competition has led to price discounts, more choice of retailers, products and plans across most states operating in the NEM. Switching rates in Victoria, South Australia, New South Wales and South East Queensland are generally high compared to other industries and countries.<sup>9</sup>

The AEMC broadened its approach to assessing competition in its review of retail competition in New South Wales, which it completed in October 2013.<sup>10</sup> In this review, we made significant use of consumer research to help inform our findings. This included consultation with consumer groups, retailers and representatives of community groups, as well as use of focus groups to better understand consumer decision making. We also undertook analysis to identify broad demographic characteristics of those consumers that remain on regulated tariffs to better understand whether

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<sup>7</sup> KPMG, *National Electricity Market, A case study in successful micro-economic reform*, 2013, pp 24-30

<sup>8</sup> It is the role of the AEMC to assess whether competition is sufficiently effective in each state to justify removal of price regulation.

<sup>9</sup> VaasaET, *Utility Customer Switching Research report*, World Energy Retail Market Rankings, 2012

<sup>10</sup> AEMC *Review of Competition in the Retail Electricity and Natural Gas Markets in New South Wales – Final Report*, 3 October 2013

more targeted engagement or support programs were required to encourage these consumers to move to market offers.

Our consumer research revealed the important role of information, and how this information is communicated to consumers, in eliciting effective consumer engagement in energy markets and imparting effective competitive pressure on retailers. We recommended a suite of initiatives in light of the findings from this research, which included:

- a media campaign using different channels to target specific consumer segments as well as the broader community;
- refinement and expansion of existing independent comparison tools which would make it quick and easy for consumers to choose or change their retailer or plan; and
- training services for community organisations to communicate key messages and assist consumers they work with to use the comparison tools.

These recommendations and supporting findings were published in a supplementary report to the Competition Review.<sup>11</sup>

Looking forward, we anticipate competition will strengthen with the emergence of product innovation and different energy services brought about by developments in enabling technology, such as smart meters and smart appliances, and the uptake of Solar PV. Innovation in products and services will lead to new business models that challenge the traditional role of the energy retailers in the NEM.

## 1.2 Institutional evolution

The governance frameworks within which markets operate are fundamental to supporting competitive markets, by promoting predictability, transparency and accountability. We agree with the Review Panel that getting the right institutional arrangements in place creates ‘a self-sustaining process for the continual reform and reassessment’. The current NEM governance framework provides a good example of such a process. However, it was not always this way and it has taken commitment get to this point.

To give effect to the NEM required COAG to endorse a cooperative legislative scheme that allowed South Australia to become the lead legislature for a new National Electricity Law (NEL). Each participating jurisdiction signed onto a Legislation Agreement, where each participating jurisdiction agreed to adopt legislation identical to that of the lead legislature and not to repeal or change the legislation without unanimous consent. Cooperative legislation was required because the Commonwealth does not have constitutional authority over electricity.

The legislation established the institutional and governance arrangements to apply the then new NEM, including the establishment of NEMMCO (National Electricity Market Management Company) as the market and system operator and NECA as the National Electricity Code Administrator as companies under the Corporations Act with independent chair and participating jurisdictions as members. NECA’s roles were to manage the Code Change process and ensure compliance with the Code, with breaches referred to the National Electricity Tribunal. NEMMCO<sup>12</sup> was responsible for the physical dispatch of generators into the wholesale spot market, register

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<sup>11</sup> AEMC, *Increasing consumer engagement, Review of Competition in the Retail Electricity and Natural Gas Markets* – Supplementary Report, 31 October 2013, p 18

<sup>12</sup> NEMMCO was subsequently incorporated into the Australian Energy Market Operator (AEMO), which was established by COAG to manage both the electricity and gas markets from 1 July 2009. It carries out the electricity functions previously undertaken by NEMMCO and assumed wholesale gas market responsibilities of the various state retail and wholesale gas market operators. It has also taken on a national planning role for electricity network development.

code participants, and perform pool settlements and coordinate and plan for power system security and reliability.

Recognising the important policy role for governments, in 2001 COAG established a new Ministerial Council on Energy (MCE) to provide policy leadership to the energy sector. It provided the means for participating jurisdictions to coordinate on important energy policy issues and make changes to the NEL where appropriate.<sup>13</sup>

However, in 2001 there was a general level of concern with the governance arrangements, in particular with regulatory overlap due to a lack of clarity in roles and responsibilities between the institutions, often leading to duplication in consultation processes between the competition regulator, the Australian Competition and Consumer Commission (ACCC) and NECA.

COAG subsequently commissioned an independent review of governance arrangements, the Parer report, which was released in 2003. In light of the recommendations contained within the report, the MCE recommended to COAG that NECA be abolished and two new statutory bodies be established:

- An Australian Energy Market Commission (AEMC) replaced NECA as the Rule maker and provided with an additional function of market development; and
- An Australian Energy regulator (AER) to be responsible for economic regulation and rule compliance at a national level

The new NEL set out the roles and functions of the AEMC and the AER. The Code was changed to the National Electricity Rules (NER). The focus of the new governance arrangements was to bring greater clarity to the roles and objectives of the governance institutions; and separate rules and market development from enforcement of and compliance with those rules. A key feature of the new arrangements was to consolidate a range of different market objectives into a single National Electricity Objective (NEO) focused on efficiency.

The relationship between efficiency and consumer interests within the NEO was expressed in the Second Reading Speech for the Bill that introduced the current governance arrangements in 2004. In this speech the Minister explained:<sup>14</sup>

“The long-term interest of consumers of electricity requires the economic welfare of consumers, over the long term, to be maximised. If the National Electricity Market is efficient in an economic sense the long-term interests of consumers in respect of price, quality, reliability, safety and security of electricity resources will be maximised”

The new arrangements also provided for a single process for developing rules, in contrast to the two tiered approach that existed under the previous arrangements (which required both NECA and ACCC to review rule changes proposed by participants).<sup>15</sup> The NEL enables any person to initiate a rule change proposal, including industry participants, other institutional bodies, end users as well as the COAG Energy Council. Previously only industry participants and NECA could submit rule proposals. If a rule was proposed by industry participants, agreement between at least 6 participants was required before the rule change could be submitted. The new framework allows significantly enhanced participation from a range of stakeholders, including consumer groups in the rule making process.

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<sup>13</sup> After merging of departments it changed its name to the Standing Council of Energy Resources in 2011 and its name then changed again in 2014 to become the COAG Energy Council.

<sup>14</sup> National Electricity (South Australia) (New National Electricity Law) Amendment Bill (2005)

<sup>15</sup> Details on how the rule making process works can be found on the AEMC's website at <http://www.aemc.gov.au/Energy-Rules/National-electricity-rules/Rule-making-process>

Importantly, the AEMC is not empowered to initiate any rule changes other than where the proposed change seeks to correct a minor error or is non-material. Instead, its role is to manage the rule change process and to consult and decide on rule changes proposed by others. The new arrangements consequently impose a strict level of policy control on market development and establish well understood and transparent processes for policy and regulatory changes.

This broad and inclusive approach to rule changes and reviews under the new institutional arrangements means that changes to energy market arrangements are comprehensive, taking into account policy objectives, commercial and financial impacts on participants and technical issues in a coherent way. An explicit focus on efficiency in developing new rules, rather than the potential for a range of ambiguous and conflicting objectives to influence outcomes, has contributed greater regulatory predictability and transparency to the rule making process.

While the current approach can take time, it also leads to better regulatory decision making, with a lower likelihood of mistakes being made. Regulatory or policy mistakes inevitably have significant consequences for markets, undermining confidence in those markets and in the institutions that govern them (as demonstrated by the early experience with NECA). This can cause momentum for reform to slow or even retreat. The current institutional arrangements and processes minimise the potential for this to occur, ensuring a 'self-sustaining' framework for ongoing market reform.

## **2. Some outstanding areas of market reform**

Structural and institutional reforms to energy markets to date have delivered substantial benefits to consumers by providing them with greater choice of energy products and services and investment in generation and network capacity to support supply reliability.<sup>16</sup>

Reform is an ongoing process however. Current institutional arrangements provide a strong mechanism for delivering further market reforms where necessary. We monitor energy markets and raise issues with the COAG Energy Council, who can then direct us to undertake further review of those issues if required; problems or issues with market frameworks can also be raised through the rule change process.

In response to a period of rising electricity prices, on 7 December 2012, COAG endorsed a comprehensive package of national energy market reforms, developed in large part on the basis of recommendations made by the AEMC, focussed on addressing the challenges of rising electricity prices

When making rules or undertaking reviews we are guided by our statutory objectives: the National Electricity Objective, the National Gas Objective, and the National Energy Retail Objective. These objectives have a common purpose to promote efficient investment in, and efficient operation and use of energy services for the long term interests of consumers.

In practical terms this means that changes to market frameworks should be focussed on delivering to consumers the energy services and products they desire in a reliable way and at reasonable prices, both now and into the future. Achieving these outcomes is a function of three broad aims:

- Competitive generation and retail sectors;
- Effective regulation of networks; and
- Effective integration of government policies with energy markets.

We first discuss key aspects of our ongoing energy market reform agenda that address the first two aims, before concluding this section with some thoughts on the importance of effectively integrating government policies with energy market design.

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<sup>16</sup> See for example section 1.9 and 1.12 in AER, State of the Energy Market 2013, available at: <http://www.aer.gov.au/publications/state-of-the-energy-market-reports>

## 2.1 Competitive sector

### *Strengthening the demand side*

While energy markets have been characterised by effective competition we have identified further opportunities for reform. The complex nature of the energy market can make it difficult for energy consumers to engage effectively in energy products and services. Better information and tools are needed to help individuals to understand and manage their day-to-day energy use.

The AEMC's Power of Choice review in 2012 recommended a package of changes to help consumers engage and participate more effectively in energy markets.<sup>17</sup> In light of these recommendations, the COAG Energy Council asked us to progress a number of reviews and rule changes:

- Distribution pricing - we are currently consulting on changes to the distribution pricing arrangements which will improve the way distribution businesses set prices so that they more closely reflect underlying network costs and remove existing cross subsidies between consumers. This will improve opportunities for consumers to manage their impact on the network and provide them with a stronger role in reducing network costs over time.
- Metering and related services<sup>18</sup> – we are consulting on a new competitive framework for the rollout of smart meters and related value added services. Smart meters will allow retailers and distribution businesses to implement more efficient price signals for consumers, to which they can then respond in ways to better manage their costs. Smart meters will also produce better consumption information which will allow retailers to create improved energy products and services.
- Customer switching<sup>19</sup> - we have recently completed a review of customer switching arrangements and made recommendations that, if agreed to by the COAG Energy Council, will significantly simplify and speed up the process of switching retailers for consumers.
- Access to data<sup>20</sup> – this rule change proposal will change arrangements to enable customers or their agents to get access to their electricity consumption data in an understandable format and in a timely manner from either their retailer or distributor. The rule change also proposes arrangements to provide consistent information about how electricity consumption data is used. The rule change will support the ability for service providers to offer new products and services to consumers, consequently empowering consumers to better manage their consumption.

These rule changes as a package will better equip consumers with options and tools necessary to more effectively engage in energy markets and manage both their own costs and contributions to network costs more broadly. Greater consumer engagement will also impart more effective competitive discipline on the generation and retail sectors of the energy market.

### *Progressing price deregulation*

We are strongly of the view that retail prices set by markets rather than regulation provide stronger incentives for retailers to innovate and produce the energy products and services consumers

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<sup>17</sup> AEMC, *Power of choice review – giving consumers options in the way they use electricity* – Final Report, 30 November 2012

<sup>18</sup> See AEMC, *National Electricity Amendment (Expanding Competition in Metering and Related Services)- Rule 2014* - Consultation paper, 17 April 2014

<sup>19</sup> AEMC, *Review of Electricity Customer Switching* - Final Report, 10 April 2014

<sup>20</sup> See AEMC, *National Electricity Amendment (Customer access to information about their energy consumption) Rule 2014* - Consultation Paper, 8 May 2014



desire, similar to the benefits customers have experienced in the telecommunications and banking sectors.

In this context, the Australian Energy Market Agreement was recently amended to give effect to a new requirement for the AEMC to undertake faster, and NEM wide, retail competition reviews, to replace the existing slower process focused on assessing competition in piecemeal fashion, state by state. Our first NEM-wide review of energy retail competition is underway. We published an approach paper on 17 January 2014.<sup>21</sup>

As part of this latest competition review we have been working closely with retailers, consumer groups, government departments, regulators and ombudsmen to inform analysis of the state of competition in NEM jurisdictions. Extensive qualitative and quantitative research has been undertaken, directly with residential and small business customers on their experiences in retail energy markets. Additionally, 14 energy retailers in the NEM will be interviewed to inform the AEMC's analysis of market barriers, independent rivalry and retailer outcomes.

The final report will be published on 1 September 2014. In the interim, we will continue to work closely with the Queensland government to provide input as required to their decision-making processes regarding retail price deregulation in South East Queensland

## **2.2 Networks**

### *Economic regulation*

Network costs, particularly distribution, have been the biggest driver of electricity price increases. The need to meet growth in peak demand caused by the rapid uptake of air conditioners has been a substantial factor in this increase. In part we are addressing this through changes to the distribution pricing arrangement noted above.

We have also recently implemented rules that give the AER more power and flexibility in setting revenues for network businesses, including the rate of return network businesses are allowed to earn on their asset bases. This will flow through to network charges, lowering the cost of access and thereby promoting competition in downstream markets.

### *Reliability settings*

We have been tasked with developing a nationally consistent framework for expressing, delivering and reporting on distribution and transmission reliability outcomes. In doing so, the AEMC will ensure that the approach taken to meet reliability standards by network businesses reflects economically efficient outcomes that reflect consumers' willingness to pay. We have recently released a draft report which sets out our views of what such a framework should look like.<sup>22</sup> A greater focus on efficiency in developing and implementing reliability standards will act to lower network costs over the longer term.

### *Optional firm access*

In response to recommendations made by COAG with regard to our Transmission frameworks Review,<sup>23</sup> we are also undertaking further detailed testing and design work for on a new regulatory framework for transmission, called Optional Firm Access (OFA).<sup>24</sup>

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<sup>21</sup> AEMC, *2014 Retail Competition Review – Approach Paper*, 17 January 2014

<sup>22</sup> See AEMC, *Distribution reliability Measures - Draft Report*, 19 June 2014

<sup>23</sup> AEMC, *Transmission Frameworks Review – Final Report*, 11 April 2013

<sup>24</sup> See, *Optional Firm Access, Design and Testing*, section of AEMC website

The new arrangements seek to improve the efficiency of network development in an uncertain and evolving market environment. Network congestion is anticipated to become more volatile and unpredictable due to changing patterns of demand as patterns of demand change and penetration of renewable energy increases. Renewable technologies typically locate in areas where there are specific wind conditions. It is more difficult to predict these sites than those associated with more traditional technologies which were close to mines and water supplies. They also impose different constraints on the network.

With declining demand and a more unpredictable market environment a tension arises between the efficient coordination of regulated transmission investment and market based generation investment decisions in a way that minimises costs for consumers in the long term. OFA will address this uncertainty in two ways.

First, by devolving greater decision-making and responsibility for transmission investment outcomes to those who have better knowledge and incentives to make those decisions, generators; and second, by creating tools for generators that would better allow them to manage their exposure to the impacts of network congestion.

Under OFA generators would be able to purchase firm level of network access to the network to protect against the financial consequences of being curtailed, which arises when the network becomes congested. Generators who do not have firm access will be required pay for congestion.

In making the decision whether to purchase firm access, generators would trade off the cost of funding transmission against the cost of not being able to access the market as a consequence of congestion. Consequently, there would be strong commercial incentives for new generators either to locate in areas of spare network capacity or purchase access rights if they enter areas where transmission capacity is scarce. This is expected to lead to more efficient development of the network over time.

A key outcome of OFA will be to better allocate the risks and costs associated with transmission investment and operation to those who best placed to manage them.

We are working towards a detailed implementation plan and draft rules by the middle of 2015.

### **2.3 Effective policy integration with energy markets**

An important issue highlighted in the work we are doing on Optional Firm Access is the potential impact of government policies developed outside of the energy market to impact on the operation of energy markets. Climate change policies for example, such as the Renewable Energy Target and Feed-in tariff policies, have altered the operation of energy markets, reallocating costs and risks and impacting price signals in ways that were unforeseen at the time of development of these policies.

While it is legitimate for governments to pursue a range of different policy objectives, it is important that this is done in a way that allows different objectives to be effectively reconciled. Otherwise pursuit of one objective may undermine achievement of other equally important objectives. For example, policies aimed at meeting a climate change objective may conflict with the ability of an energy only market design to send meaningful price signals for new investment in generation capacity, which is arguably the central policy objective of a competitive wholesale market in electricity. This in turn may undermine future supply reliability. The operation of the Renewable Energy Target in its current form has led to wholesale market price outcomes divorced from underlying energy supply and demand fundamentals (wholesale prices are very low, yet new generation capacity is still entering the market)<sup>25</sup>

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<sup>25</sup> For a more detailed discussion on this issue, see the AEMC's submission to the *Review of the Renewable Energy Target* at <http://retreview.dpmc.gov.au/>

Other examples include social policies (typically applied at a jurisdictional level) that are focused on achieving equity objectives through cross subsidising costs between consumers. However, averaging costs across consumers also distorts price signals, which means that consumers have little capacity to adjust their behaviour in ways that help reduce these costs over time. In this regard, support provided to specific groups should be designed in such a way as to preserve efficient price signals for investment and efficient consumer behaviour (ie through concessions or rebates). This is a key issue we are exploring in the distribution pricing consultation process.

Further, development of government policies without due consideration of their likely effects on operation of energy markets also introduces uncertainty into the AEMC's rule change process. We make changes to the rules in accordance with our statutory objectives, whose primary purpose is to promote efficiency. But what is efficient under one set of government policies may not be so under a different set of policies, where such policies have been developed in a way incompatible with the energy markets they affect. Changes to market rules may no longer remain 'fit for purpose' as the policy landscape changes. This may lead to unintended and unpredictable outcomes for market participants.

In light of this, we consider it important that the development and design of government policies, where relevant, are effectively integrated with energy markets so that they do not distort market mechanisms and signals. In this regard, it is important that institutional bodies responsible for managing markets are involved in the development and design of such policies, to ensure they are effectively integrated in a manner that minimises the overall costs to consumers.

Evidence from international markets suggests that where this does not occur, impact on market price mechanisms, together with uncertainty and policy risk, will require greater government intervention down the track, in otherwise well-functioning markets, at much higher costs to consumers. **Box 1** is a current example of how limited policy integration can result in potentially inefficient and costly outcomes for energy consumers.

### **Box 1: Energy and environmental policy – the United Kingdom**

The use of energy policy as a tool to achieve environmental policy goals has resulted in extensive government intervention in what was a competitive, liberalised energy market.

The United Kingdom (UK) has committed to an 80 per cent reduction in greenhouse gas emissions by 2050 (from 1990 levels). To achieve this target, the UK:

- participates in the European Union Emissions Trading Scheme and has legally committed to meeting 15 per cent of total energy consumption from renewables by 2020, but is aiming to achieve 30 per cent;<sup>26</sup>
- is subject to the European Commission Large Combustion Plant Directive,<sup>27</sup> which has resulted in the closure of 7,400 megawatts (MW) of thermal capacity, with a further 4,600 MW set to close before the end of 2015;<sup>28</sup> and
- supports renewable energy generation through a number of policies that provide an incentive for the deployment of large scale renewable energy (predominately wind).

The Department of Energy and Climate Change has estimated that £110 billion is expected to be required to upgrade and decarbonise the UK's energy infrastructure.<sup>29</sup> In this environment, policy

<sup>26</sup> United Kingdom Government 2014, Department of Energy and Climate Change, Increasing the use of low carbon technologies, <https://www.gov.uk/government/policies/increasing-the-use-of-low-carbon-technologies>.

<sup>27</sup> The LCPD aims to reduce acidification, ground level ozone and particles throughout Europe by controlling emissions of sulphur dioxide and nitrogen oxides and dust from large combustion plants.

<sup>28</sup> Ofgem 2013, Great Britain and Northern Ireland National Reports to the European Commission, p. 76.

<sup>29</sup> Department of Energy and Climate Change 2014, Maintaining Energy Security, <<https://www.gov.uk/government/policies/maintaining-uk-energy-security--2>>.

and regulatory uncertainty has contributed to a lack of investment and “new challenges to security of supply”.<sup>30</sup> In the past 10 years alone there has been five energy white papers completed across three different government departments.<sup>31</sup>

In response, the UK Government has intervened in the market by:

- Subsidising specific generation technologies through contracts for difference. Under this policy, renewable energy generators and eligible nuclear and other technologies will be guaranteed a minimum price for their electricity, such that if pool prices fall below the minimum price, government payments will make up the difference.

In October 2013, the UK Government agreed a minimum price of £92.50/MWh for a new nuclear project, which is around double current wholesale prices and equates to a subsidy estimated at £800 million to £1 billion per year.<sup>32</sup>

- Implementing a potentially costly capacity market due to short term security of supply concerns.<sup>33</sup> Capacity markets provide a payment to generators for maintaining the ability to generate when called on, irrespective of whether the plant produces. Due to the certainty required by the system operator, generally only thermal technologies, such as gas and coal-fired generators, can provide this service.

Given the scale of government intervention in the UK energy market, it is likely that potential investment in unsubsidised generation will be crowded out by government subsidised generators. Consequently, for the near future UK energy consumers will be exposed to any inefficient investment decisions through potentially higher than necessary electricity prices.

### 3. Competition policy and energy markets

Current institutional arrangements and processes address most competition related issues that affect energy markets. Changes to market arrangements occur through the rules we make which must promote efficiency. There is a strong link between competition and efficiency. It is a core aspect of our considerations when we assess rule changes and undertake reviews. Where we judge competition to be effective we consider there are unlikely to be any changes that can be effected through public policy or regulatory measures that would result in net gains to the broader community.

Competition may be judged as effective where there is evidence of continuous independent rivalry among retailers, generators and other energy providers for the provision of energy services to consumers. Retailers and generators will make profits in effectively competitive markets, this provides the incentive for market entry; however their ability to price sustainably above their costs is disciplined by the ability of consumers to choose other retailers or a retailers' ability to choose other generators. In this context, prices above costs over a sustained period of time would only be possible if the competitive process was not working effectively to encourage new entry (due to entry barriers). Where there is evidence of sustained market prices above costs and barriers to entry should form the test of whether intervention is required.

This high level perspective of competition has informed our detailed reviews of competition in retail markets and our recent assessment of generator market power- arising from a rule change submitted by the Major Energy Users.<sup>34</sup>

<sup>30</sup> Ofgem 2012, Electricity Capacity Assessment, p. 5, <<https://www.ofgem.gov.uk/ofgem-publications/40203/electricity-capacity-assessment-2012.pdf>>.

<sup>31</sup> Lambert, R. 2013, UK energy policy restricts growth, Financial Times, <<http://www.ft.com/intl/cms/s/0/cf236024-7b51-11e2-8eb3-00144feabdc0.html?siteedition=intl#axzz328N6ieWB>>

<sup>32</sup> Dorfman, P. 2013, University College London, quoted in: <<http://www.bbc.com/news/business-24604218>>.

<sup>33</sup> Department of Energy and Climate Change 2013, Electricity Market Reform Delivery Plan, p. 13.

<sup>34</sup> AEMC, *Potential Generator Market Power in the NEM, Rule Proponent(s) Major Energy Users – Final Determination*, 26 April 2013

The retail markets we have already assessed in this process, including Victoria, New South Wales and South Australia, are characterised by significant product variety, heavy discounting and some of the highest rates of customer switching in the world. That said, we have identified some areas for improving consumer engagement and participation in energy markets (as highlighted in section 2.1) that should further strengthen competition in retail markets over time.

Our key conclusion on generator competition, in light of the MEU rule change, was that the level of rivalry between generators was sufficient to prevent any sustained exercise of market power by any one generator in all regions other than South Australia. Our analysis of South Australia was less conclusive about whether exercise of market power had been a problem in the past, however, we were satisfied that given evolving market dynamics that any sustained future exercise of market power would be highly unlikely.

### 3.1 Competition law and dynamic energy markets

Existing energy market frameworks cannot specifically address structural issues in energy markets; these are managed through the merger provisions of CCA.

Since the start of the NEM there has been evolution toward increasing vertical integration in the market. Some key examples are.<sup>35</sup>

- Three retailers—AGL Energy, Origin Energy and Energy Australia—jointly supply 76 per cent of retail electricity customers and 85 per cent of gas customers in eastern Australia. The entities increased their market share in generation from zero per cent in 1998 to 35 per cent in 2012.
- Many new entrant retailers since 1998 are vertically integrated with entities that were previously standalone generators—for example, International Power (trading as Simply Energy in retail markets), Infratil (Lumo Energy) and Alinta. Government owned generators are also vertically integrating. The generator Snowy Hydro owns Red Energy, which operates in the New South Wales, Victorian and South Australian retail markets. The Tasmanian Government owned Hydro Tasmania has a retail arm (Momentum Energy) that trades in the NEM outside of Tasmania.

To date, energy market mergers between competitive elements of the market have typically been allowed to go ahead under the merger provisions of the CCA, which in certain quarters has raised concerns, in particular in relation to the impact on liquidity of contract markets.

There are substantial risk management benefits associated with vertical integration, which reflect the opposite types of risks faced by retailers and generators. Generators typically face the risk that pool prices for energy sales will be lower than expected in any particular period, while retailers face the opposite risk, that prices for energy purchases will be higher than anticipated. Vertical integration is one way to hedge this risk, and for this reason appears to be a favoured form of business structure in liberalised energy markets.

However, an important consequence of vertical integration is that a vertically integrated business will have less need to buy or sell wholesale contracts, which may result in a reduction in liquidity in the contract market. Consequently, where vertical integration goes beyond a certain point in terms of its scale, it may materially impact on contract market liquidity, which could then act as a barrier to entry in the retail market. This is because with low liquidity new entrants may not have sufficient access to reasonably prices hedge contracts.

While the AEMC does not have a specific view on whether this point will be reached in energy markets, we are confident that the existing merger provisions in the CCA are fit for purpose in adequately dealing with this issue on a case by case basis. Its approach is to assess each merger

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<sup>35</sup> KPMG, *National Electricity Market, A case study in successful micro-economic reform*, 2013, p 43

on its merits, taking into account a very broad range of issues and circumstances in determining whether a merger should proceed (the 'merger factors'). Integral to this process is whether or not a substantial lessening of competition is likely to arise as a result of a proposed merger. This contrasts with a style of regulation which imposes a blanket proscription of certain types of mergers, *ex ante*.

The dynamism inherent in energy markets means there is no guarantee that a particular structure that is efficient now, will continue to be the most efficient in the future. Energy markets are currently characterised by an increased pace of technological change, declining demand and uncertainty about the future of gas, the carbon price and renewable energy policies. In such a market environment it is by no means clear whether vertical integration into centralised forms of generation will continue to be the profit maximising business model going forward. There is a danger that new policies or rules that attempt to second guess how efficient market structures should look in this context may lead to unintended outcomes and deter future investment in the energy sector.

We consider the essential strength of a flexible merits-based approach to mergers is that it is flexible and adaptive to changing market circumstances, and therefore particularly relevant in dynamic, complex industry environments such as the energy sector. A flexible approach acknowledges the often unique characteristics of individual mergers and therefore, implicitly, the insurmountable difficulty policy makers face in attempting to determine the most efficient market structure at any point in an industry's evolution. A given merger proposal may be in the public interest under one set of market and regulatory circumstances but not under another.

#### **4. Productivity Commission recommendations in relation to certification**

The Productivity Commission's review of the National Access Regime <sup>36</sup> raised an important issue of concern for the AEMC, related to certification, which we consider was not adequately dealt with by the Commission.

The CCA provides for the certification of a state access regime. A regime that has been certified is not able to be declared under the CCA. COAG members agreed to certify their energy access regimes and remain certified under the AEMA. To date, no jurisdiction has certified its regime.

In its current form, the certification requirement could affect the AEMC's role and function as a rule maker and energy market developer:

- It is possible that certified energy access regimes would need to be re-certified following material AEMC rule changes. This could add another layer in the rule change process.
- Certification currently includes a public submissions process and Council inquiries, which can reopen issues previously assessed by the AEMC in the rule change process.
- The Minister would be the final decision maker, informed by advice from the NCC.
- Certification involves consideration against different criteria to rule changes (eg. the long term interests of consumers is not currently an explicit criterion under the national access regime certification process).
- As a consequence of these issues, instead of the AEMC have a single and clear objective, the national gas and electricity laws would potentially need to be amended so that the AEMC could consider the certification implications of proposed rule changes.

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<sup>36</sup> Productivity Commission, *National Access Regime*, Inquiry Report, 25 October 2013

- The AEMC would need to factor into its statutory assessment process whether a proposed rule change could be considered a 'substantial modification' by the NCC and Minister and jeopardise the ongoing certification of the electricity and gas regimes. For example, the current work we are doing on OFA relates directly to the terms of access to the network, and could consequently be considered a substantial modification.

The Productivity Commission has to a significant degree recognised these issues and considered the costs of certification and re-certification would outweigh the benefits. It subsequently recommended that COAG release the states and territories from requirements to certify their energy access regimes. We note however, that this still leaves open the risk that third parties may seek declaration of the energy access regime in certain circumstances. Consequently, we do not consider the recommendations go far enough in this respect.

We remain of the view that a better option is for a change to Commonwealth legislation (such as an amendment to the CCA) that deems the national energy access regimes to be effective access regimes and therefore certified access regimes for a time period and/or subject to certain conditions being satisfied. To address concerns about material deviation between the energy access regimes and the National Access Regime over time (where the deviation represent a deviation from good regulatory practice) exemption could involve a periodic review mechanism. For example, such a trigger could involve review of the exemption if the clause 6 principles of the Competition Principles Agreement or the objects clause of Part IIIA of the CCA significantly diverge from the objectives of the National Electricity Law or National Gas Law.

We would be happy to discuss this proposal further with you, and to provide any additional advice that you would find helpful regarding the impact of any potential changes to the National Access Regime to the energy markets, including possible alternatives to certification.