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26/11/2012

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Dear Commissioners,

### **Electricity Network Regulatory Frameworks draft report**

EnergyAustralia welcomes the opportunity to make a submission on the 'Electricity Network Regulatory Frameworks' draft report (*the draft report*).

EnergyAustralia is an integrated and diversified energy management company committed to helping our customers with efficient energy solutions. We provide gas and electricity to over 2.7 million household and business customers, and own and operate an integrated portfolio of energy generation and storage facilities across Australia.

The draft report provides useful insights on the drivers of recent electricity price rises, and confirms that effective competition in retail and wholesale electricity markets, and efficient regulation of monopoly networks, are the best mechanisms to meet the long term interests of consumers.

Analysis in the draft report complements recent work by the Australian Energy Market Commission (AEMC), and highlights the complexity of the underlying issues by reaching different conclusions on some key issues.

We generally agree with many of the findings and observations in the draft report, particularly in relation to efficient network regulation, private ownership, efficient pricing and deregulation of competitive retail markets.

We support the widespread adoption of metering technology necessary to support flexible pricing of energy and network services, and empower consumers, where it is economic to do so. We believe that a contestable roll out of meters as recommended by the AEMC in the 'Power of Choice' review is preferable, and more likely to efficiently deliver consumer benefits in practise, than a distribution lead roll out recommended in the draft report. However, we recognise that there may be a case to require distribution businesses to install advanced meters in specific areas and adopt cost reflective time based tariffs to reduce or defer the costs of network augmentation. We believe that this could be achieved within a contestable model.

We agree that retail price deregulation is essential to the successful introduction of efficient time of use pricing to improve network productivity under any metering roll out model. Retail price deregulation is fundamental to an efficient and sustainable energy market.

We are concerned that the draft report makes observations and recommendations in relation to fundamental design features of the wholesale electricity market without due consideration of their costs and benefits, or proportionality to the perceived problems.

In particular, while an 'Optional Firm Access' model for generator access to the transmission network has some theoretical merit, more work is required to define and assess whether it would be likely to deliver efficient outcomes and net benefits in practise. A firm access model represents a fundamental change to a core design element of the National Electricity Market (NEM). The depth of analysis presented to date is not sufficient to allow even an 'in principle' assessment its merits. A rigorous cost benefit analysis and impact assessment should be undertaken prior to any decision to proceed.

More detailed comment on the recommendations in the draft report follows.

#### *Regulatory Incentives (chapter 5)*

We generally support the recommendations in chapter 5 to improve the regulatory incentives and accountability for network service providers.

The Commission's analysis and findings appear consistent with the AEMC's determination in relation to the 'economic regulation of network service providers'. As we noted in our submission to the AEMC,<sup>1</sup> we consider the proposed amendments to the rules are consistent with the principles of good economic regulation and would be expected to improve accountability and transparency, reduce information asymmetry, and enhance the economic efficiency of regulatory determinations.

Specific recommendations for further regulatory changes that the Commission makes in its final report should be tested through the rule change process.

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<sup>1</sup> <http://www.aemc.gov.au/Media/docs/EnergyAustralia---received-15-October-2012-fe93f03d-eb09-499e-9faa-14251f558ca4-0.pdf>

### *Ownership (chapter 7)*

We agree with the finding that there is no rationale for state ownership of electricity network businesses given the sophisticated economic and technical regulatory regimes in the NEM. As noted in the draft report, state ownership also creates perverse interactions with incentive based economic regulation.

There is also no rationale for state ownership of, or investment in, electricity generation given the sophisticated and highly competitive wholesale electricity market in the NEM. Government ownership of electricity generation assets can crowd out private investment and undermine market signals by creating a risk that operational and investment decisions may be influenced by non-commercial factors.

State ownership of electricity assets also creates an inherent conflict of interest between Government's role as policy and law makers and their commercial role as asset owner.

We support the privatisation of all electricity assets within the NEM; however we respect the right of Governments to seek a mandate for such transactions. Prudently structured and executed, privatisation would have multiple benefits including improved:

- Efficiency and effectiveness of incentive regulation of electricity networks;
- Productivity in asset and operational management; and
- Investor confidence.

Electricity distribution businesses should be structured for sale in a manner that supports efficient regulation and service delivery in the long term interest of consumers, including supporting the future development and use of benchmarking by the Australian Energy Regulator (AER) as recommended in chapter eight of the draft report.

### *Benchmarking (Chapter 8)*

We generally support the recommendations in chapter eight of the draft report to improve regulatory transparency, efficiency and incentives through the increased use of benchmarking. The recommendations could be strengthened by specifying target dates for implementation or review through the rule change process for each recommendation.

### *Demand Management technologies (chapter 10)*

We support the widespread adoption of metering technology necessary to support more efficient time based pricing of energy and network services. We do not support the recommendation in the draft report that distribution businesses should lead the roll out of advanced metering. We believe that a contestable, market lead roll out of meters as recommended by the AEMC in the 'Power of Choice'<sup>2</sup> review is likely to be superior in maximising benefits for consumers.

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<sup>2</sup> [www.aemc.gov.au/Market-Reviews/Open/transmission-frameworks-review.html](http://www.aemc.gov.au/Market-Reviews/Open/transmission-frameworks-review.html)

The draft report recommends, on balance, that the roll out of advanced metering be lead by distributors on an area by area basis as this would maximise network benefits. In its 'Power of Choice' review, the AEMC recommends a retail lead roll out as this would maximise competition, innovation and consumer engagement.

This divergence of views is not surprising given the different starting points for the two reviews. Advanced metering infrastructure has potential to enable significant long term benefits by increasing the efficiency and productivity of both competitive energy markets and monopoly network services. The meter essentially represents the demarcation point between the competitive energy market and monopoly distribution network.

Therefore, while we believe a contestable model is superior we recognise that there may be a case to require distribution businesses to install advanced meters in specific areas and adopt cost reflective time based tariffs to reduce or defer the costs of network augmentation.

We believe that with careful design this could be achieved within a contestable model.

It should be possible to implement a hybrid model that facilitates the co-optimisation of network and market benefits. A model where distribution businesses can roll out meters by area where justified by network benefits and retailers can provide meters and enhanced services to customers who request them.

To support the efficient roll out of advanced metering under any model, the following key components need to be addressed:

- Minimum Functional specifications that cater for both network and retail services;
- Separation of metering charges;
- Meter ownership and arrangements for tenants, sale of property, change of retailer;
- Access arrangements and service standard that support benefits realisation; and
- Technology neutral platforms and protocols that encourage participation and innovation.

### *Time-based pricing (Chapter 11)*

Flexible, cost reflective pricing is necessary to optimise demand side participation in the market, increase productivity of electricity networks, and inform efficient investment in the NEM. We welcome the draft report's recognition of the need to move to more cost reflective, time based, pricing of electricity.

We support in principle the draft recommendations to require nationally consistent implementation of cost reflective, time based pricing for distribution network services predicated on the long run cost of meeting peak demand (11.1, 11.2, 11.3, 11.4 and 11.5).

A deregulated, competitive retail market will then facilitate development of a diverse range of retail products to allow customers to save money by altering consumption patterns and/or choosing tariffs that best suit their consumption profiles. As noted in chapter twelve of the draft report, it is critical

that retail markets are fully deregulated to realise benefits from time variable cost reflective network tariffs.

Traditional flat tariff regimes are inequitable as well as inefficient. Customers with flat usage or low peak demand cross subsidise those with high peak demand. As demonstrated in research presented to the AEMC by the Brattle group, up to 80% of low income customers in the US may be over paying under flat tariffs.<sup>3</sup> There is no reason to assume that a similar proportion of low income consumers would not benefit from the introduction of dynamic cost reflective tariffs in Australia.

It is important to note that peak demand itself is not necessarily inefficient; in part it reflects the underlying time value of energy services to our customers. Heating is more valuable when it is cold, cooling when it is warm and lighting when it is dark. The problem is that flat pricing effectively subsidises consumption during peak times and penalises consumption in off peak times. Cost reflective dynamic pricing will remove these cross-subsidies and provide incentives for consumers to reduce consumption of lower value energy services during peak times. For example, during a peak period on a hot day, a consumer may choose to reduce consumption for lighting, washing and other energy services and prioritise the use of electricity for air-conditioning.

Flexible, cost reflective pricing is both necessary and sufficient to promote efficient levels of demand at all times. As noted by the AEMC in the power of choice review:

*‘An efficient demand response will occur when the costs to the consumer of supply (including both energy and network costs) is more than the costs of not consuming, i.e. the “opportunity cost” of not consuming. If a retail contract accurately reflects the cost of supply, including energy and network costs, consumers will change their consumption behaviour in response to market signals. In this situation consumers will decide whether the value of consumption is worth the cost incurred in the supply of electricity.’<sup>4</sup>*

However, not all consumers may have the capacity to adjust their consumption. We support the draft recommendation (11.6) that the introduction of cost reflective time base pricing be accompanied by appropriate assistance for vulnerable customers who are adversely affected. Such assistance should be provided through the Australian (or State) Government’s tax and transfer system rather than through electricity specific mechanisms that are more likely to dull the incentives provided by efficient pricing and undermine the benefits of reform.

We also support the draft recommendation that the AER should require distribution businesses to demonstrate they have actively engaged with retailers very early in the development of time based prices (11.7). However, the second part of this recommendation, that the AER require distributors and retailers to demonstrate ‘they have engaged with, and educated, consumers prior to the introduction of smart meters, and again prior to the introduction of new time based customer tariffs’ is very broad and likely to result in expensive and unnecessary red tape.

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<sup>3</sup> Brattle Group ‘Managing the benefits and costs of dynamic pricing in Australia’. 3 October 2012. [www.aemc.gov.au](http://www.aemc.gov.au)

<sup>4</sup> Draft report p63

### *Complementary Reforms to support demand management (chapter 12)*

We agree with the finding of the draft report that the removal of retail price regulation 'is necessary to allow a vibrant and competitive retail market to develop'<sup>5</sup> and that there would be little or no point in proceeding with the reforms to metering and network pricing recommended in chapters ten and eleven unless retail price regulations are removed.

Without retail price deregulation, the proposed reforms would add cost and complexity without significant benefit. We also agree with the observation in the draft report, that it is not practical to efficiently regulate time based retail prices.<sup>6</sup>

We support the recommendation that retail price regulation should be removed where effective competition is present. Further, as noted by the AEMC in the 'power of choice review', there is also 'merit in removing or amending price regulation not only where competition is already effective, but also as a means of stimulating competition in retail markets'<sup>7</sup>.

Where price regulation is retained, it is important that the framework promote competition, reflect long run costs and allow for flexible time based pricing options.

In addition to deregulation of retail prices, it is important that other inflexible restrictions on bill structure and timing be reviewed. Interval meters create a wealth of data and retailers will need to experiment and innovate with bill structures to create valuable information for consumers from this data, and variable price signals are likely to be more effective with more frequent billing cycles.

We agree with the draft report's recommendation that distribution network revenue regulation should be subject to weighted average price (not revenue) caps.

### *Distributed Generation (chapter 13)*

We agree that Governments should review the disparate range of subsidies available for small scale distributed generation and replace them with consistent and fair arrangements that recognise the actual value that the distributed generation provides.

However, requiring direct payments from network service providers to small embedded generators is likely to be administratively inefficient, confusing for consumers, and undermine the direct relationship between the retailer and their customer. It would be preferable for distribution businesses to publish tariffs and/or incentives for different distributed generation types and areas that retailers could then incorporate in product offerings to customers.

### *Reliability Frameworks (Chapter 14)*

We support the draft report recommendations that efficient levels of reliability should be based on balancing the benefits to customers of fewer interruptions with the costs of delivering that reliability. This should be informed by the value that customers place on reliability.

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<sup>5</sup> Draft report, p415

<sup>6</sup> Draft report, p433

<sup>7</sup> AEMC 'Power of Choice' Draft report page 111. <http://www.aemc.gov.au/Market-Reviews/Open/stage-3-demand-side-participation-review-facilitating-consumer-choices-and-energy-efficiency.html>

### *Transmission reliability (Chapter 15)*

We agree that there would be merit in a single NEM wide reliability framework determined by customer preferences, and that AEMO should have a stronger more strategic role as National Transmission Planner (NTP) to improve the efficiency of the transmission planning arrangements.

However, in our view, TNSPs themselves are best placed to directly plan and augment their own transmission networks under an efficient incentive based regulatory framework and to appropriately trade off between capital expenditure and operational expenditure.

Having AEMO undertake the planning function for TNSPs would also appear to conflict with the optional firm access model recommended in chapter eighteen of the draft report, and the ownership principles recommended in chapter seven.

In relation to planning standards, we support the move towards reliability standards that are independently pre-defined, economically derived and location specific. Such standards may be expressed deterministically and we support the hybrid approach as practised in South Australia and recommended by the AEMC in the Transmission Frameworks Review, second interim report.<sup>8</sup>

### *Distribution reliability (Chapter 16)*

We agree with the draft report recommendation that the Standing Council on Energy and Resources (SCER) should specify that reliability requirements for distribution businesses be included in the Service Target Performance Incentive Scheme (STPIS) and that the STPIS should be defined by the AER and be consistent across the NEM.

### *The efficient use of interconnectors (Chapter 18)*

We are concerned that the draft report makes observations and recommendations in relation to a fundamental design feature of the wholesale electricity market - open access - without due consideration of the costs and benefits, or proportionality to the perceived problems.

The draft report recommends the implementation of the 'Optional Firm Access' package proposed by the AEMC in the Transmission Frameworks Review, Second Interim Report.<sup>9</sup>

While we consider that the Optional Firm Access model may have merit, we do not support this recommendation as it is worded in the draft report.

A firm access model represents a fundamental change to a core design element of the National Electricity Market (NEM). Such fundamental change should be subject to rigorous cost benefit analysis and impact assessment prior to a decision to proceed.

The Optional Firm Access model has some potential merit, in theory. However, more work is needed to define and explain the basic principles that underpin the proposal to allow an informed

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<sup>8</sup>AEMC <http://www.aemc.gov.au/Market-Reviews/Open/transmission-frameworks-review.html>

<sup>9</sup> Ibid.

assessment of whether it would be likely to deliver efficient outcomes and significant net benefits. The depth of analysis presented in the AEMC second interim report is not sufficient to allow even an 'in principle' assessment of the merits of the Optional Firm Access model.<sup>10</sup>

The AEMC has not provided an estimate of the likely costs or benefits of the proposed model. The analysis in the Productivity Commissions draft report indicates that there is currently no material problem with investment in, or operation of, interconnectors. Wholesale electricity prices are at historically low levels (excluding carbon) and well below efficient new entrant costs.

In this context, the recommendation to introduce the optional firm access model is premature and the caveat 'in the absence of unintended consequences' being identified is insufficient.

Fundamental changes to market rules need to demonstrate they are expected to deliver substantial net benefits, are practical to implement and include appropriate transitional arrangements that recognise investments made in good faith under existing rules.

Market reform is an ongoing process, a repeat game. The value and risks associated with purchasing long term firm access would be informed by treatment of investors in the transition from open access to optional firm access. The ongoing nature of market development is emphasised by the draft report recommending a further fundamental transition (from optional firm access to full nodal pricing) in ten years.

Investment in existing generation assets has been undertaken in good faith under the open access regime. Investor confidence in the NEM would be significantly undermined if the introduction of the proposed new access regime caused arbitrary and material destruction of asset value.

The draft report suggests that the allocation of the existing transmission capacity based on historical use would reduce incentives to change investment decisions by generators<sup>11</sup>. This assertion appears to be without economic foundation. The method of allocating the existing transmission capacity to existing generation capacity will have distribution effects, but should have little or no impact on the economic efficiency of the optional firm access model in guiding future investment in new generation, improving inter-regional hedging markets or informing bidding behaviour.

If the Commission is disposed to supporting the optional firm access model, it should also note the need for a rigorous impact assessment and appropriate transitional arrangements to ensure equitable treatment of investments made in good faith under the existing open access regime.

#### *Identifying future transmission investment (Chapter 19)*

As noted above in our response to chapter fifteen, on balance we support the adoption of the South Australian hybrid approach to transmission planning NEM wide.

We agree that there is merit in aligning the transmission regulatory investment test for inter-connectors with a consistent test for intra-regional transmission across the NEM to avoid potential distortions.

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<sup>10</sup> See our submission on the transmission framework review second interim report for more detail:

<http://www.aemc.gov.au/Media/docs/Energy-Australia---received-18-October-2012-8a8520aa-0132-4247-984c-9edd78d535e5-0.pdf>

<sup>11</sup> Draft report, p612



The nature of transmission reliability justifies some conservatism in the definition of the appropriate reliability settings. As noted in the draft report, transmission failure is a high consequence low likelihood event and consumers place a high value on the reliability of transmission networks. Underinvestment in reliability should be avoided as it can result in large costs and widespread supply disruptions. Resulting community concern can then drive regulatory settings to be biased to encourage inefficient over investment for a period.

### *Governance (Chapter 21)*

We believe that on balance it would be preferable to fully separate the AER from the ACCC to create a fully independent and appropriately resourced specialist energy regulator.

Whether the AER remains within the ACCC or not, we agree that it should be fully accountable for its own budget, staffing and performance. The regulator should be funded by Government.

We agree that there is a need for better consumer engagement, particularly in the regulation of monopoly network services where consumers may be unable to express their preferences through the market. Consideration should be given to the Productivity Commission's recommendation for "adequate ongoing funding of a single but broadly representative consumer body with expertise in economic regulation and relevant knowledge and understanding of energy markets".<sup>12</sup>

The purpose, structure and funding of such a body would need careful consideration and consultation to ensure it was truly representative of a broad cross section of consumer interests. Funding of a national consumer body should be structured in a way that ensures independence and consolidates the range of existing consumer advocacy funds.

The remit of the proposed consumer body should be focussed on representing household and small to medium business customers, particularly in relation to network regulatory determinations and reform.

The ongoing development and implementation of the rules in the long term interests of consumers is the fundamental role of the AEMC and the AER under the national electricity and gas laws. It would be important when considering the design and establishment of any new consumer body to ensure it did not inadvertently reduce the accountability of the AEMC and AER in the performance of their respective roles.

We do not agree with the draft report's recommendation that the national electricity (or gas) law be amended to expedite the making of rules arising from any appropriately conducted independent review relevant to the NEM that are agreed by SCER, such as this Productivity Commission review.

By their nature, general broad based reviews are unable to assess specific issues and their implications in sufficient detail to allow the making of a rule change to bypass the rule change process. The level of definition, analysis and assessment of the impacts of the recommendations in the draft report is not sufficient to support the making of new rules without further consultation.

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<sup>12</sup> Draft report, Recommendation 21.3, pp. 57-8

## *Conclusion*

EnergyAustralia welcomes the Productivity Commission's draft report on 'Electricity Network Regulatory Frameworks'. The draft findings and analysis complements other recent analysis of the national electricity market and we generally agree with many of the recommendations, particularly in relation to more efficient network regulation, private ownership, efficient pricing and deregulation of retail markets.

We support widespread adoption of advanced metering necessary to support flexible pricing where it is economic. However we encourage the Commission to review the merits of a contestable market lead roll out of metering in preference to the draft recommendation that distribution businesses lead the roll out. We believe that the Commission's specific objective, that distributors be required to introduce advanced meters and cost reflective time based tariffs in specific areas can be accommodated within a well designed contestable roll out model.

While we consider there is potential merit in a new model for generator access to the transmission network, more work is required to define and assess whether the 'Optional Firm Access' model recommended in the draft report would be efficient and deliver net benefits. We request the Commission consider what information is needed to support a robust cost benefit analysis and appropriate transitional arrangements to maintain long term investor confidence in the national electricity market and rules.

We agree that there is a need for better consumer engagement and that the proposal for a new broadly representative consumer body requires careful consideration.

We thank the Productivity Commission for the opportunity to respond to the draft report.

Yours sincerely

Signed for email

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