23 November 2012

The Commissioners
The Productivity Commission
Level 12, 530 Collins Street
Melbourne VIC 3000, Australia

By email: electricity@pc.gov.au

Dear Commissioners

Electricity Network Regulatory Frameworks Draft Report

Origin Energy Limited (Origin) welcomes the opportunity to contribute to the Productivity Commission's (Commission) Review of Electricity Network Regulatory Frameworks. The Commission should be commended for the comprehensive and insightful nature of the Draft Report.

Origin is a major Australasian integrated energy company focused on gas exploration, production and export, power generation and energy retailing. Listed in the S&P ASX top 20 the company has over 5,900 employees and is a leading producer of gas in eastern Australia. Origin is Australia's largest energy retailer servicing 4.4 million electricity, natural gas and LPG customer accounts and has one of the country's largest and most flexible generation portfolios with approximately 5,900 MW of capacity, through either owned generation or contracted rights. We are a significant investor in low emissions and renewable energy technologies, including gas, geothermal, wind, hydro and solar and are by far the largest retailer of green energy products such as GreenPower.

This submission focuses on the following areas summarised below:

Demand management
Origin supports initiatives that facilitate efficient decision-making, particularly ones that improve the quality and understanding of available information and promote access to enabling technologies and supporting infrastructures. Cost reflective pricing is necessary in enabling and enhancing demand management which would assist in reducing upward pressure on electricity prices in the National Electricity Market (NEM). The continued regulation of retail prices in some jurisdictions continues to be an impediment to realising the full benefits of cost reflective pricing - a clear process and time table is required for deregulation.

The uptake of distributed generation also has a role to play in demand management and it is important that the regulatory framework does not inhibit market entry for these plant. One outstanding issue that needs to be resolved is the disproportionately high network tariffs affixed to cogeneration plant that export electricity to other buildings.

Transmission
Origin does not support the Commission's recommendation that the Australian Energy Market Commission's (AEMC) proposed Optional Firm Access (OFA) model be implemented as a precursor to nodal pricing. Both proposals would represent a fundamental change to the current market arrangements and impose a high degree of complexity and uncertainty on market operations, which would outweigh any perceived benefits.

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Governance
The recommendation that the AEMC should be obliged to fast track rule changes stemming from proposals from SCER-sanctioned reviews should be treated with caution. It is important that all proposed rules are thoroughly assessed against the AEMC's rule making test to ensure compliance with the national electricity objective.

Yours Sincerely,

Tim O'Grady
Head of Public Policy

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1. Demand management

The recent retail electricity price increases have placed renewed focus on demand management, in particular peak demand. As the Draft report highlights, more effectively managing peak demand will assist in curtailing network expenditure, putting downward pressure on electricity prices. In considering how best to achieve this objective, it is important to bear in mind that given Australia's climate/seasonal conditions, peak demand is an inherent feature of the energy market. Given this, we must be realistic about the outcomes of any demand management initiatives as the complete smoothing of demand is unlikely to be attainable. As such the focus should be on putting in place a framework that would allow for the most efficient use of energy, which would in turn assist in restraining peak demand growth. In keeping with this thinking Origin does not support some of the more radical reforms proposed in the AEMC's Power of Choice Review – in particular the introduction of the demand response mechanism. We consider this proposed mechanism would distort the underlying market signals in the NEM, an industry with billions of dollars of sunk investment. This can result in inefficient decision-making by existing and prospective participants in both the short and longer term. Accurate price signals are necessary to inform efficient decision-making by generators, retailers, consumers and new investors.

The key to effective demand management is a suite of interrelated measures that would enable consumers to make informed decisions around their energy usage, and the encouragement of distributed generation. We elaborate on these issues further below.

1.1 Demand management technologies

Origin supports the deployment of smart meters where benefits exceed the costs and where there is customer acceptance.

In terms of a market-led deployment of smart meters or a mandated (and regulated) roll out approach, Origin would refer the Commission to the submission made by the Energy Retailers Association of Australia to the Draft Report and the AEMC's *Power of Choice* review for further detail.

Where a mandated roll out is determined as the way forward, Origin believes certain conditions need to be put in place:

- Services and service levels based on agreed functionality with appropriate access arrangements need to be agreed by industry participants;
- Services facilitated by smart meter technologies (such as remote reading, energisation and de-energisation and support for home area network devices) should be available from day one of a smart meter installation, in order to allow customers to take immediate advantage of the technology and avoid the delay in benefits;
- Infrastructure owners and operators (for example distribution businesses) should not engage in the marketing or sale of products on the customer side of the meter in the interest of competitive neutrality; and
- The only exception to the above requirement would be the failure of retailers and other third parties to deliver services such as load control for the benefit of the market generally.

Origin agrees that community acceptance is a fundamental requirement for (a) the deployment of smart meters and (b) transitioning customers to time-based pricing structures. Customer choice has been suggested as a possible pre-requisite for the installation of a smart meter, but careful consideration should be given to this approach as it could result in increased costs.

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We have also found that reaction to services such as our Origin Smart portal, which provides customers with detailed information on the energy use and cost (utilising data provided by Victorian smart meters) has been well received by customers and is an example of the information and educational tools that will be required to foster community acceptance of smart meters over time.

1.2 Cost reflective network pricing

Origin supports network prices that are more cost reflective and economically efficient. We recognise that meeting this objective involves retailers as well as networks, since the retailer has the primary interface with the end customer. Generally Origin is in favour of the move towards cost reflective pricing being market driven, as opposed to policy makers seeking to directly mandate particular outcomes. Where governments opt to mandate these changes they also have an important responsibility in communicating the justification for this to the wider community - i.e. how cost reflective pricing can help inform consumption behaviour that will save the community money over the long term, and how governments plan to manage the impact on vulnerable customers. The challenges encountered in the mandated roll out of smart meters in Victoria are testament to the importance of keeping customers informed. We acknowledge that retailers too have an important role in educating customers about changes in their prices and the drivers for these - indeed a retailer's communications constitute an important part of its competitive offering - yet without a clear message from government a consumer backlash remains reasonably likely in our view. The impact of such a backlash could be to delay the benefits available from more cost-reflective network pricing for many years. Retailers also have an important role in formulating tariff products that are tailored to customers' personal circumstances.

Where cost reflective pricing is implemented, it is important that special arrangements are put in place to mitigate the impacts on vulnerable customers who may not be able to adequately switch their consumption from peak periods. This should be done in a manner that directly supports this sub-set of customers on a means-tested basis with government payments linked to their electricity bill. The adopted approach should not distort the overall market. Origin concurs with the Commission that current cross-subsidised usage charges do not support customers in hardship.

As a retail business, Origin is unable to identify or assess customers in hardship other than by granting access to our hardship programme to all who require it. There is therefore a clear role for government in ensuring that customers that most need support to manage the move to more cost-reflective pricing are able to receive it.

1.3 Retail price deregulation

Origin welcomes the Commission's acknowledgement of the importance of price deregulation generally, and specifically in relation to realising the benefits of cost reflective pricing. Retail price regulation frequently mandates the way in which retailers must reflect network prices in regulated retail prices. This can impede network pricing signals from reaching consumers - which means that deregulation is a critical pre-condition if cost reflective pricing is to contribute to more efficient demand management.

Retailers must be given scope to set retail prices informed by customer requirements and the pressures of the competitive market. This will promote competition and innovation which will benefit energy consumers.

Origin notes the Commission's findings in relation to possible paths to price deregulation, and specifically that in the absence of immediate price deregulation a second best option would be for governments to remove price regulation according to a strict timetable. In the Commission's *Review of Regulatory Burdens on Business: Social and Economic Infrastructure* in 2009 the Commission cited Origin's proposal that, once the AEMC has found competition to be effective in a given jurisdiction,

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the onus should be put on the jurisdictional government to justify its decision not to remove price regulation. Specifically, we proposed that the jurisdiction be required, via an amendment to the Australian Energy Markets Agreement (AEMA), to provide:

- A transparent rationale for their decision not to deregulate, using evidence to identify where competition is inadequate;
- Proposed steps to be taken by the jurisdictional government to address remaining limitations in the competitive environment;
- A date within the next twelve months by which to report on progress in addressing limitations in the competitive environment as identified, with new measures proposed if required; and
- A date within the next twelve months by which time a new decision on removing price regulation will have been taken.[1]

In our view the above still has merit and we encourage the Commission to consider this proposal when formulating its recommendations in relation to retail price deregulation.

1.4 Communicating changes to retailers

An important administrative issue that needs to be resolved is the communication of changes in network prices to retailers. Current arrangements only allow a matter of days to review new network price structures and devise retail tariffs that reflect these. Also, there is currently no consultation on new network price structures. If the Australian Energy Regulator was to consult on network prices this would allow retailers to highlight where they would be unable to apply a given tariff due to system constraints. Under current arrangements retailers can sometimes be obliged to apply flat increases that do not reflect the underlying network structures. The Independent Pricing and Regulatory Tribunal (IPART) has proposed a rule change to the Australian Energy Markets Commission that is designed to improve processes for releasing network prices - Origin is supportive of this proposal.

1.5 Distributed Generation

Distributed generation has an important role to play in demand management as it can reduce the demand for energy from the main electricity system leading to avoided network expenditure which should ultimately result in lower costs to energy consumers. It is therefore important that the market framework enables the owners of distributed generators to realise the full economic benefits they provide. The introduction of more cost reflective network pricing is expected to make a material improvement to the business case for individual building and precinct cogenerated electricity.

However, one outstanding issue that needs to be resolved is the disproportionately high network tariffs affixed to cogeneration plant that export electricity to other buildings. The economies of scale of having a larger sized generator that has spare capacity to supply thermal energy to other buildings in the vicinity is largely hindered if other off-site clients have to pay full network charges. As it stands now electricity that is sent virtually across the road, where the distance may be 50 meters or less is subject to the same network tariff as electricity coming over 200 kilometers away in the Hunter valley. This is not reflective of the economic realities and will need to be addressed.

[1] Origin submission cited in *Annual Review of Regulatory Burdens on Business: Social and Economic Infrastructure Services*, Productivity Commission Research Report, Canberra, August 2009, p.201

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In terms of specific proposals outlined in the Draft Report, Origin is supportive of recommendation 12.2 which calls for a review by the AER of the Demand Management and Embedded Generation Connection Incentive Scheme.

2. Transmission

2.1 Network planning

Origin agrees with the AEMC's conclusion in the Transmission Frameworks Review that financial incentives are the best means of ensuring efficient decision making. Therefore we are not supportive of the Commission's proposal that AEMO be given responsibility for all network planning in the NEM. Not for profit organisations are not subject to the requisite financial incentives that would guide optimal investment decisions in the long term. This is not to say that there is no role for AEMO, in fact we would agree that AEMO's role as the National Transmission Planner is crucial as it serves as an important check and balance on the jurisdictional transmission businesses.

Additionally, having the market operation and network planning function within a single entity could result in a conflict of interest. Currently, there is a check and balance between the system operator and the jurisdictional planning bodies to ensure that both network reliability and system security are met. If those responsibilities sat in a single entity, it raises questions as to how that entity would optimise network investment decisions or how incentives in the regulatory framework could balance those objectives. Such a framework is likely to reduce transparency in decision-making.

2.2 Interconnector capacity

The Commission has come to the conclusion that no additional interconnector capacity is required in the NEM. We note that Electranet and AEMO are well advanced in assessing the feasibility of upgrading the capacity of the Heywood interconnector and that Powerlink is about to embark on similar work in relation to QNI. From this perspective, it appears that the current regulatory framework is providing appropriate incentives to investigate inter-regional investment opportunities as required. The significant economic net benefits tests required to support an interconnector upgrade ensure a high standard of rigor and the regulatory framework overseen by the AER provides the appropriate checks and balances to minimise the risk of unnecessary investment. It is therefore important that this work is allowed to progress and the Commission's position does not pre-empt inter-regional investment where it is found to deliver economic benefits for the market.

2.3 Network access and nodal pricing

The Commission has recommended that the AEMC's proposed Optional Firm Access (OFA) model be adopted, and that after it has been operational for 10 years that nodal pricing be implemented subject to a cost benefit analysis. Origin is not supportive of this recommendation.

Both the OFA and nodal pricing represent a fundamental change to the current transmission framework and to the NEM as a whole, and as such there must be a reasonably high threshold if they are to be adopted. The starting premise if either of these proposals were to be implemented is that the current set of transmission arrangements are deficient to the point that they should be replaced. There has been no evidence to suggest that this is the case. For example the two issues most often discussed in relation to transmission are – dispatch uncertainty (due to congestion), and disorderly bidding. However, there is no evidence to suggest that either the current or likely future incidence of these is material enough to warrant the introduction of new arrangements.

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In regard to the OFA, it is important that there is a thorough assessment of the magnitude of the perceived benefits the model is expected to confer on the market, as well as the potential challenges around its implementation and operation. In our submission to the AEMC's Transmission Frameworks Review Second Interim Report, Origin outlined a number of practical and operational issues that are likely to undermine the OFA's effectiveness. We will not revisit them here, except to say that the introduction of the model would significantly increase the complexity of the NEM's operations, and we do not consider that the perceived benefits are sufficient to justify this. The AEMC has flagged the need to undertake more detailed analysis but have also pointed to the inherent difficulties in carrying out this work. Our concern is that this could result in the assessment of the OFA being conducted on a purely theoretical basis. This does not constitute the holistic decision making framework that is required as often concepts that can appear to be theoretical sound often prove to be practically unworkable and operationally complex.

We need to look no further than New Zealand where the decision to adopt nodal pricing whilst seemingly prudent from an efficiency of dispatch point of view, has resulted in some unintended consequences. With no means of hedging price differences between nodes, there is currently very little liquidity or depth in the contracts market which has impeded market efficiency. At first glance it would seem that New Zealand policy makers should simply develop firm transmission rights (FTR) to manage the inherent basis risk under nodal pricing. However whilst this has been contemplated and debated for a number of years, the development of a suitable regime has proven to be anything but simple, with still no FTRs in place. The introduction of nodal pricing in the NEM has been debated on a number of occasions and subsequently rejected. It should be note that, the geographical layout of the NEM does not support the creation of local trading hubs, where both supply and demand centres are reasonably close which could facilitate competitive hedging relationships. Generation and load in the NEM are not naturally co-located, meaning the increase in wholesale price granularity – while theoretically beneficial – would likely erode contract market liquidity, leaving participants – as in New Zealand – exposed to unmanageable risks accompanied by increased operational market complexity.

The issue of the cost of implementation is another important consideration when contemplating the adoption of fundamentally different transmission arrangements in a mature market such as the NEM. The ERCOT market in Texas is perhaps a useful test case where the move from a zonal to a nodal market was plagued by costs and timing overruns with a final implementation cost of over US$500 million - more than double the initial estimate.

3. Governance

Whilst a speedier rule change process may be desirable, this must be weighed against the need to have a comprehensive and thorough process that would examine all relevant aspects of a proposed rule. From this perspective Origin would like to express caution with the Commission's proposal that the National Electricity Law (NEL) be amended to allow the expediting of rules arising from an appropriately conducted review agreed by SCER. Firstly, we consider it important that the outcomes of any review should be subjected to the AEMC's rule making test to ensure that it is in keeping with the national electricity objective. Additionally, the Commission's recommendation seems to open the door for rule changes to stem from reviews conducted by any number of organisations. Generally, the making of rules in the NEM should continue to solely be the responsibility of a dedicated energy market body – i.e. the AEMC in consultation with market participants and the wider community. Other organisations can input into this process by generating recommendations through their own review processes, but the AEMC should thoroughly assess these and not be obliged to fast track these proposals. In line with this thinking Origin does not support the proposal that the South Australian Minister be given broader powers to make rules. It is important that consistency in approach is maintained in the rule making process to ensure that all proposed rules are assessed against the same benchmark which will give market participant greater confidence in the regulatory process.

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