



7 December 2015
Ms. Catherine Cussen
Queensland Productivity Commission
PO Box 12112
George St QLD 4003

Electricity Pricing in Queensland Issues Paper

Dear Ms. Cussen

The Energy Networks Association (ENA) welcomes the opportunity to make a submission to the Queensland Productivity Commission (QPC) in response to the *Electricity Pricing in Queensland Issues Paper* published by the QPC on 14 October 2015.

The ENA is the national industry association representing the businesses operating Australia's electricity transmission and distribution and gas distribution networks. Member businesses provide energy to virtually every household and business in Australia. ENA members own assets valued at over \$100 billion in energy network infrastructure.

Conventional delivery of services is being upended across industry sectors by technology and customer preferences.

This evolution of the way customers use, produce and value electricity and energy services will continue well into the future. While these changes challenge traditional business models for the grid and the established electricity system, they also create opportunities for alternative services which can unlock additional value for customers and businesses alike.

The Issues Paper poses a large number of questions. ENA responses to key issues are provided below.

Carbon abatement

The ENA supports policy initiatives which promote least cost abatement. COAG has announced the development of a National Energy Productivity Plan (NEPP). This Plan is likely to deliver significant low cost abatement. Emissions reduction policies which preference specific technologies limit the ability of market participants and investors to examine the full range of potential economic solutions. Emission reduction policies should be outcome focused and technologically neutral. There have been numerous Australian marginal abatement cost curves completed. Policy and regulatory frameworks should focus on ensuring least cost abatement with technology neutral, outcome-focussed measures.

Transmission and distribution networks are the critical link which allows consumers to connect to and share renewable energy, from remote renewables such as windfarms to Australia's world leading penetration of distributed solar.

Electricity Network Transformation Roadmap

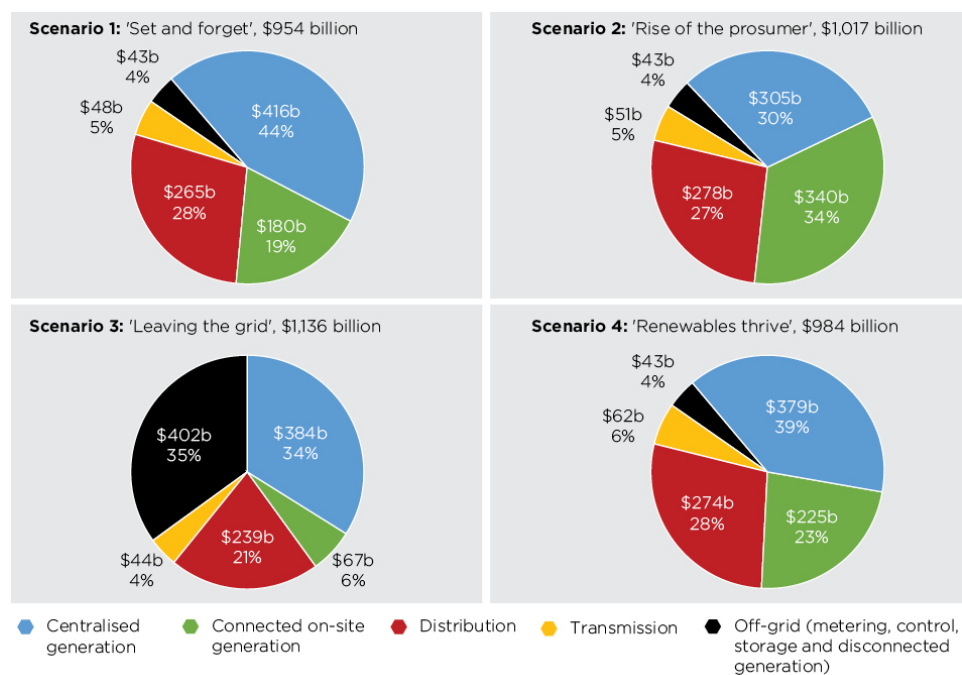
CSIRO and the ENA have partnered to develop an Electricity Network Transformation Roadmap (the Roadmap) – a blueprint for transitioning Australia's electricity to enable better customer outcomes. ENA and CSIRO recently released the Roadmap Interim Report in early December 2015 that shares early learnings with the community.

The Electricity Network Transformation Roadmap proposes that:

1. Disruptive change is upon us – All future scenarios see electricity networks continuing to perform critical roles in supporting Australia’s modern lifestyle and economy. This critical infrastructure, however, now faces significant and transformative challenges. Many of these challenges are unprecedented and were not anticipated by the architects of current industry systems and processes.
2. The change is multidimensional – The transformative forces impacting electricity networks are multidimensional and not solely technological. They represent a convergence of business model, regulatory and societal changes, together with technological shifts. Modern electricity systems function as complex ‘ecosystems’, so many of these effects must be addressed in a whole-of-system manner rather than a siloed or piecemeal one.
3. The pace and scale of change may outstrip current change management – Regulatory change processes are underway, but increasingly, they are at risk of being outpaced by disruptive threats. Regulatory mechanisms were not designed to facilitate the transformative change that may now be necessary. In addition, regulators increasingly expect network businesses to lead their own reinvention rather than wait for external guidance.
4. A ‘critical decade’ of transition is ahead – The implications of the 2050 scenarios for Australia’s electricity systems are significant, not least because they diverge from the present. Change is occurring quicker than expected, and on a broader scale. The 2015–25 decade is expected to be a critical window for ensuring Australia’s electricity networks are configured and enabled to provide the best outcomes for customers and the nation through to 2050 and beyond.
5. Agility, collaboration and co-design are needed – No single player or industry sector can ‘engineer’ the energy system transformation. To survive and prosper in this context, network businesses, energy institutions and diverse market actor’s alike need to learn, collaborate and innovate. Structured, whole-of-system collaboration and co-design by all participants is needed.

Source: CSIRO and Energy Networks Association 2015, *Electricity Network Transformation Roadmap: Interim Program Report*. p. 20.

The Interim Report also includes updated CSIRO analysis of very diverse future energy scenarios in which the direct investment by customers or their agents is expected to represent at least a quarter of all system expenditure to 2050, in excess of \$220 to \$470 billion.



Reforming the Queensland Solar Bonus Scheme to enhance energy productivity

In this environment, ENA contends that Governments policies should not have the effect of picking technology winners. With regard to the Queensland Solar Bonus Scheme (SBS) ENA believes that network businesses should not bear the costs of the Scheme. ENA notes that the QPC is undertaking a review into Solar Feed-In Pricing in Queensland. The Victorian Essential Services Commission is undertaking an Inquiry into the true value of distributed generation to Victorian Consumers. The AEMC has also received a Total Environment Centre Rule Change on Local Generation Network Credits. These inquiries will consider the value of solar generation and will also consider for example “the most appropriate policy and regulatory mechanisms for compensating different benefits of distributed generation, including considering their practicalities and costs”¹.

It is ENA’s position that it is more appropriate that funding of the SBS, which is a subsidy to owners of these assets, should be paid for by taxpayers and explicitly costed as government expenditure rather than being paid for in the higher electricity costs of all electricity customers. Given that not all consumers can access solar PV – for example, because they are renting, or face high costs to finance, or are apartment owners – it is inequitable for these consumers to pay more than \$300 million annually for the benefits primarily enjoyed by other customers. ENA notes that electricity consumers will continue to fund the SBS for those that remain eligible until 2028.

In the past, the Queensland SBS was paid for by all electricity consumers through higher electricity prices. Following advice from the QCA that in future, feed-in tariffs should be paid for by electricity retailers (because they benefit financially from on-selling the exported solar energy to other customers) the Queensland Government changed the scheme. The changes reduce cost of living pressures while also ensuring customers who install PV receive some payment for the energy they export.

Any scheme that recovers its costs from distributors will add to electricity prices and reduce electricity sector productivity. This should be avoided in the design of future schemes.

ENA believes the best way to recover network costs associated with demand more efficiently and equitably is for consumers to be charged a price that reflects the efficient costs of providing that service. The distribution network pricing objective and the distribution pricing principles will ensure that prices better reflect the costs of the network service and that consumers can make more informed decisions about how they use electricity.

Australia’s world leading rates of rooftop solar installation are both an opportunity and a threat to fair and more efficient prices for customers, with up to a further 7 million customers projected to install solar panels by 2034². Solar panels usually require advanced meters that measure the time of energy use, so there would be no additional metering investment needed to provide a fair network tariff. However, if network tariffs remain unchanged the result will be over-investment in distributed energy resources and higher community costs of up to \$17.7 billion by 2034³.

Productivity improvement

ENA believes that there are areas for productivity improvement across the electricity sector including:

- Cost reflective pricing involving the expansion of the roll-out of smart meters (taking into account lessons learnt from the Victorian roll-out re maximising benefits to consumers and minimising costs).

¹ Essential Services Commission Inquiry into the true value of distributed generation to Victorian Consumers Terms of Reference <http://www.esc.vic.gov.au/getattachment/0a3f1608-ac62-43a1-83e4-7123262a9851/Terms-of-Reference.pdf>

² ENA Position Paper: Towards a national approach to electricity network tariff reform. p. ii. December, 2014

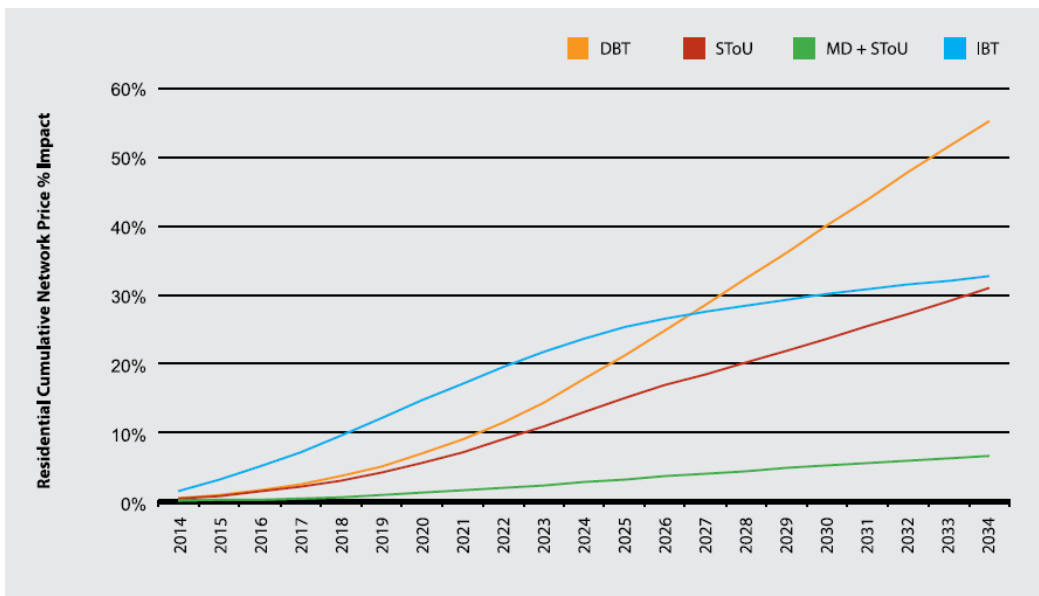
³ Network Pricing and Enabling Metering Analysis - Prepared by Energeia for the Energy Networks Association, November 2014 p.5.

- Investigating the extent to which competition is effective in the retail energy market.
- Increasing the utilisation of energy efficiency and demand side measures may reduce the need for some future expansion of electricity network infrastructure. Measures which target peak demand may be particularly useful in increasing the productive use of assets. An expansion of the deployment of storage technologies at both residential/business and grid scale may reduce the need for further network enhancements. Depending on the location and the costs involved, this may be economic now, particularly in regional and remote areas.

Cost reflective distribution pricing

There are immediate benefits in the transition to cost-reflective pricing as consumers with relatively flatter loads will no longer cross-subsidise the peakier use of other customers. Electricity prices will be lower over the longer term than they would otherwise have been, and productivity higher, as customers reduce their peak demand and improve network capacity utilisation. This reduces the long term outlook for network infrastructure augmentation to respond to peak demand growth, with benefits to customer bills. As reflected in the chart below⁴, detailed analysis by Energeia has highlighted the potential benefits to the Australian community of achieving timely electricity distribution network tariff reform. The analysis compared outcomes from three alternative network tariff scenarios to the base case of an inclining block network tariff scenario, assuming that the network tariffs are fully passed through into the retail tariff. The analysis finds that:

- » up to \$655 per year (\$2014) in unfair cross subsidies in 2034 could be avoided for residential customers which cannot or do not invest in distributed energy resources;
- network tariff reform could achieve average residential electricity bills up to \$250 (in \$2014) per year lower in 2034, when compared to the base case scenario;
- network tariff reform could make the difference between network prices increasing by only 7% by 2034, compared to a cumulative increase under the base case scenario of over 30%.



Some of the risks in the transition to cost-reflective pricing are:

⁴ Network Pricing and Enabling Metering Analysis - Prepared by Energeia for the Energy Networks Association, November 2014

- while there is a likelihood that many vulnerable consumers will be better off from the transition to cost-reflective pricing, the outcome for any individual household or small business depends on their peak demand, relative to their average level of use. For this reason it is essential that there is an adequate safety net in place for those that need it most, to assist customers to manage their bill impacts and to inform them of what choices they could make that would help them manage and take control of their network bill.
- There is evidence that low income and vulnerable customers are less energy efficient than other households, or small businesses, due to poor housing, inefficient appliances and lack of access to on-site generation that might more cost-effectively meet their consumption needs. Governments need to look at opportunities to address the energy efficiency of these households, their access to on-site generation technologies, and the opportunities represented by load control tariffs to consume more outside of peak times.
- Potential for reform fatigue if the pace of transition is too slow and only a small proportion of customers see the benefits in the early years of the change. This could occur because with an opt-in framework there is slow adoption of cost-reflective tariffs, or retailers do not reflect the network price signal in the retail tariff.
- Information and decision tools need to be developed that are accessible and appropriate for consumers to be supported to make informed choices about cost-reflective network tariffs. There will be a critical role for trusted institutions and organisations such as governments, councils, libraries, to partner with networks and retailers in making information and decision tools available.

Managing impacts on vulnerable customers

ENA acknowledges that in some jurisdictions there are policies in place which equalise electricity network tariffs in whole or in part across a state. Where these policies are in place as a matter of government policy, ENA supports the costs of these community service obligations being calculated and transparently disclosed as they are effectively borne by all other customers and not taxpayers in general.

ENA would recommend the options developed in the ENA commissioned HoustonKemp report and quoted in the ENA Information Paper “Supporting Vulnerable Energy Customers”:

- harmonising the value of government assistance across jurisdictions;
- effective targeting of government assistance based on need;
- maintaining the relative value of energy concessions over time;
- providing assistance to finance household or community investments in technology or energy efficiency improvements;
- transitioning vulnerable customers to more cost reflective electricity network pricing, including the option of ‘social tariffs’; and
- improving customers’ access to information and decision tools⁵.

Financial assistance to support eligible, vulnerable, customers with their energy bills varies by jurisdiction. ENA would support a national review of vulnerable energy customer financial assistance. Assistance measures and their effectiveness should be measured against a consistent framework. The

⁵ Supporting Vulnerable Energy Customers – ENA Information Paper p. 1 available at: http://www.ena.asn.au/sites/default/files/ena_information_paper_-_supporting_vulnerable_energy_customers_may_2015.pdf

national review, to be undertaken by the COAG Energy Council prior to the introduction of cost reflective pricing from 2017, could consider:

- the effectiveness of current assistance measures, including whether it is reaching those most in need;
- the appropriate eligibility criteria for customers requiring assistance;
- the basis for energy concessions, whether as a percentage of the energy bill or a flat rate;
- the forms of assistance that could be provided;
- the advantages and disadvantages of harmonising eligibility for assistance and the value of assistance across jurisdictions.

Consumer access to information resources

Improved access to energy usage information gives consumers greater ability to manage and control their energy costs. Industry and Government should work collaboratively to communicate change to consumers to increase consumer understanding and uptake of changes in the energy market such as new tariffs.

As mentioned above, the ENA is currently partnering with CSIRO to develop a Network Transformation Roadmap. The Roadmap is designed to identify the preferred transition which the electricity network industry must make in the next decade, to be ready to support better customer outcomes under a diverse range of long-term energy scenarios.

In addition, industry has developed publications, fliers, websites, and information portals to make information more accessible to the community and address existing informational and behavioural barriers.

There is a shared responsibility for governments, retailers, networks to work with consumers and their advocates to improve consumers' ability to participate in energy markets and to make informed choices.

Governments should work collaboratively with industry and regulators to provide consumers with the information they need.

Important sources of advice include:

- Commonwealth and State Government websites
- Price comparator websites such as the AER's *Energy Made Easy*
- Customer access to consumption and billing information (including meter data)
- There is a potential roll for call-centres in the context of network tariff reform/networks working in trusted partnerships
- Energy ombudsmen's offices can provide advice
- Energy consumer advocates have experience in advising consumers on energy matters.

Consumers are at the forefront of the transformation that is underway in energy markets, through the choices they make to adopt new tariffs, or to take up new services from a range of providers. Consumers may be better equipped and informed in the future to make energy choices that match their preferences. It may not mean that consumers will have a greater understanding or engagement with the business models of their service providers.

There is low awareness of government comparator websites. A key information gap is an understanding of the drivers of network costs, which is peak demand. Access to information on their demand will be useful in customers managing their electricity usage and their bills. Customers with smart meters will have a better opportunity to manage their costs, as they have a record of how much they used and when they used it (their load profile).

In the process of developing Tariff Structure Statements distribution networks have engaged with a range of consumers, consumer groups and advocates and published information on the drivers of network costs and the potential to save on energy bills. Cost reflective pricing will be gradually phased in across the NEM commencing no later than 2018. In Victoria where the roll out of smart meters has been completed, some networks have established web portals through which customers can access their load data and compare retail offers.

NECF

The National Energy Customer Framework (NECF) is a set of national laws, rules and regulations governing the sale and supply of energy (electricity and reticulated natural gas) to consumers. It works by each participating state applying the framework as a law of its jurisdiction. NECF aims to reduce regulatory red tape for the electricity industry, drive greater efficiencies and foster increased competition in the retail market. Victoria has not yet implemented NECF due to some unresolved state-specific issues. This means it is not achieving the full regulatory benefits of a national scheme.

The ENA strongly supported the development and implementation of NECF. ENA is keen to see consistent application of the legislation across jurisdictions, and for the NECF to be introduced in Victoria. Continued inconsistency in the application of the NECF between states is a concern, creating inefficiency for companies with national activities. The ENA agrees with the AEMC's assessment that the energy specific, consumer protections framework will require rethinking as it potentially lacks the flexibility to adapt to changing business models, encourage innovation and new products and services but still protect customers.

ENA considers that in this dynamic environment, a holistic review of the policy and regulatory framework may be warranted to ensure it remains fit for purpose, light-handed and supports innovative service delivery to customers by both new and traditional service providers.

Yours sincerely,



John Bradley
Chief Executive Officer