Power for the future

Submission to the Review of Queensland's energy legislation

June 19, 2018
1.0 About the submitter

Master Electricians Australia (MEA) is the trade association representing electrical contractors, and is recognised by industry, government and the community as the electrical industry’s leading business partner, knowledge source and advocate. We have members in every state and territory, giving us direct experience in navigating the disparate regulatory regimes. Master Electricians Australia is an experienced and trusted adviser to governments and regulators on industry issues. Our website is www.masterelectricians.com.au.

2.0 Overview

A reliable and affordable supply of electricity is one of the building blocks of a civilised society. And the contractors who connect and homes to the grid and ensure the ongoing safety of electrical supply and operation are the most reliable barometer of consumer attitudes. All the feedback coming to Master Electricians Australia members indicates a high level of public concern and confusion with the operation of the electrical supply network. Our members report that their customers are frustrated with being forced to operate inside a system with limited choices, and which they struggle to understand.

As a result, we very much favour regulatory changes that will benefit consumers by opening the market to new and innovative product offerings, and give greater power to individual consumers. For example, allowing them to directly offer their excess generation capacity for sale directly to other consumers rather than via a retailer “middle man”. Or by allowing their battery storage capacity to be drawn upon by distributors to boost the stability and security of the grid. Currently these innovative approaches cannot be taken up by players in the national energy market because of the restrictive nature of electricity regulation.

We also have some concerns over the fact that the amount of regulation governing supply of electricity is increasing, rather than decreasing. This is largely a function of new national regulations being laid over the top of existing state-based regulation. We have devoted some time to highlighting this issue in this submission. And while it may not be directly within the terms of reference of this review, the impact of that double regulation is driving up costs for Queensland consumers, while significantly slowing down connection times. And given that the solution, in our view, lies wholly within the Queensland jurisdiction, it is something we feel this review cannot ignore.

Master Electricians Australia imagines a future electrical market and network where consumers are far more empowered, and where innovative technological solutions obviate the need for additional generation capacity. We believe it is very much within the power of this review to lay down a framework for a far more innovative, flexible and consumer-based power supply system that will serve the needs of Queenslanders into the 21st century.
3.0 Power of Choice and connecting meters

The Australian Energy Market Commission introduced Power of Choice in 2017, promising that it would give consumers greater options in the way they use and pay for electricity, and introducing greater competition – particularly in the business-to-business (B2B) aspects of the market. One of the major reforms was to remove control over metering from the network provider and hand it directly to the retailer. This change was intended to drive down the costs associated with installing and servicing meters.

In Queensland, however, particular regulatory forces have meant that this change has resulted in a significant increase in red tape and major delays in connections to new homes. In some cases that we are aware of, consumers have waited for up to 12 weeks to have power connected in their new home. These lengthy delays have also been experienced in South Australia, Tasmania and the ACT, while New South Wales has enjoyed relatively smooth transitions to Power of Choice. Victoria will not move to the new system until 2021, and Western Australia is not in the National Electricity Market at this stage.

The delays in Queensland have partly been caused by the complicated process of having a meter installed, and partly because in Queensland – unlike in New South Wales – only the network provider (Energex or Ergon) is permitted to connect a new home to the network.

These two factors have combined to add between three and 16 business days to the time required for a new connection. The process that previously took just five days now takes anywhere from eight to 21 days to complete under the Power of Choice model. These delays have an indisputable impact on the cost of building a new home – charges that are passed on to consumers. We conservatively estimate these charges are adding at least $2000 to the cost of a new home, and will cost Queenslanders $241 million over the next five years.

This calculation has been based on just a small number of direct costs to consumers, and they do not reflect any of the indirect costs (such as administration, business finance or price inflation) that are also likely to impact the building industry and, through it, new home builders. Nor do they attempt to quantify the long-term impact on power prices of inefficiencies in network operations. So the true cost to Queenslanders could reasonably be assumed to be significantly higher than $241 million. However, we will use this conservative figure as the basis for our considerations.

This submission proposes a simple alternative to the existing arrangement – one which could be implemented with relative ease, and which could cut the delays and costs associated with Power of Choice in Queensland in a very short period of time. We urge the Queensland Government and the state’s electricity market regulators to give serious consideration to this proposal, in order to ensure our market is operating as intended under Power of Choice, and that Queenslanders pay as little as possible to connect to the state’s power network.
3.1 Power of Choice isn’t working property in Queensland

The following diagram shows the series of activities and interactions between various players that must occur for a new metered connection in Queensland. While the time frame varies between city and country areas, the steps in the process are largely uniform state-wide.
Since *Power of Choice* was implemented in Queensland the minimum connection time for a new meter has blown out to between 8 and 21 business days, depending on location and how quickly all the interactions between the various agencies occur. In reality, most electrical contractors and builders are reporting that the process takes between eight and 12 weeks. Previously, this was a simple interaction between Ergon/Energex and the retailer, which took no more than five days.

The process for any additions or alterations to an existing service is even longer, as a Planned Interruption Notification (requiring two days’ notice to the customer) must also be issued in writing. This means that this process now takes between 13 and 28 business days, depending on location and workflow. This is an increase of between 5 and 14 days.

In addition to the time delays, the new system in Queensland has created a situation where the electrical contractor must make repeated visits to the site. In NSW, the approved electrical contractor tests the mains cables once prior to connecting them to the grid and performs a polarity test once after connection, before the site is energised. Under the current Queensland system, the installing contractor, the service installer and the metering installer are all obliged to perform these tests to meet their obligations. The additional time of this rework is very unproductive, and ultimately the cost is borne by the builders and their customers. We estimate the net additional cost of multiple site visits to be in the order of $700 per home, compared with having a single contractor perform all the work.

### 3.2 The cost to Queensland consumers

While it is difficult to estimate the total cost to Queensland consumers as a result of the *Power of Choice* changes, we can make some conservative assumptions about some of the costs. For example, an average increase in connection time of 10 business days will have the following flow-on costs to consumers waiting to take possession of their new homes.

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Two weeks’ generator hire by builders requiring power on site:</td>
<td>$600</td>
</tr>
<tr>
<td>Two weeks’ additional rent or mortgage for home builders:</td>
<td>$700(^1)</td>
</tr>
<tr>
<td>Three additional site visits by electrical contractor/service providers:</td>
<td>$700(^2)</td>
</tr>
<tr>
<td><strong>Minimum additional cost to new home buyers</strong></td>
<td><strong>$2000</strong></td>
</tr>
<tr>
<td>Multiplied by 23,000 new homes in Queensland per year</td>
<td>$46 million per year</td>
</tr>
<tr>
<td>Five-year cost, including CPI:</td>
<td>$241 million(^3)</td>
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Builders have also found themselves in a financially precarious position where they have completed a home for a client, but have been unable to make the final payment claim and hand over the project to the home owner. This has not only exposed builders to cash flow issues, it

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1 Based on three-bedroom home @ $350 per week
2 Assuming callout from NSP, MC and contractor (total cost $1000), compared with a single contractor callout ($300)
3 Based on average CPI growth of 2.0 percent over five years
has also triggered liquidated damages in their building contracts. Only anecdotal information is available on this issue.

3.3 The experience in other states

In stark contrast with Queensland, the Power of Choice model in some other states has streamlined the workflow process and resulted in faster connections. For example, the new connection process that takes between 8 and 21 days in Queensland is completed by the contractor. In New South Wales, the approved electrical contractor completes the same work while on site. This is because New South Wales allows licenced electrical contractors with special training and accreditation (Accredited Service Providers or ASPs) to install meters and connect homes directly to the grid. As a result, the contractor who is wiring the house is able to complete the entire job while he or she is on the premises, rather than waiting for the network provider to connect the home to the grid and then the metering provider to install the meter, then having to return to test all the wiring. If the contractor is not accredited to install meters and network connections, he or she will often have a professional alliance with a contractor who is. This means the entire process can be managed very efficiently by a single contractor. If there has been any negative experience in NSW, it has been that they have struggled to supply meters quickly enough to keep up with demand.

3.4 The conflict between Federal and State regulation

The reason that Power of Choice is working to slow down, rather than speed up, the process of metering connections lies in the additional regulation that has now been laid over the process. Rather than removing the state regulation, Power of Choice has simply added a Federal layer on top. And due to the particular nature of Queensland’s regulatory system, the additional Federal regulation has had a greater impact than has been the case in other states, as outlined above. If the Queensland regulations that govern the interactions between the various players in the process of connecting a new meter were removed or streamlined, the system would function as it does in other states.

3.5 Breaches of the ring-fencing arrangements

Master Electricians Australia is aware of some efforts to speed up the connection times by having crews from Energy Queensland (Ergon or Energex) undertake the meter connections and/or installation, as was previously the case. While this practice has reduced some of the red tape in the process and resulted in some reductions in waiting times, it clearly breaches the original intent of the reforms. If the only way to overcome problems with the regulations is for government-owned corporations to breach them (and in the process damage or destroy the pro-competition protections they contain) then the regulations clearly must not be working properly.
3.6 Options for streamlining the Queensland experience

The current arrangements are in place via a Ministerial regulation, the Electricity Regulation 2006, which requires that the electricity entity (Energex or Ergon) must "provide and install or arrange for the provision and installation of its service lines". This provision suggests that Energex and Ergon already have the authority to outsource the job of connecting homes to the network. However, in reality they do not do so, and we believe positive reform is urgently needed in this area.

There may be a temptation for the Government to allow Ergon and Energex to return to installing meters, and connecting homes to the network while they are on site. As outlined above, this measure is being taken in some areas in breach of the ring-fencing arrangements, and has gone some of the way to reducing the delays. But it also undermines the measures intended to protect business competition, and somewhat nullifies the promised benefits of Power of Choice.

Similarly, we believe that proposals being considered at a federal level to impose time limits on the meter installation process are also not a suitable solution. While this would send a strong signal to the market about the government’s expectations, it would not remove any of the regulatory blockages that have been introduced into the Queensland system. Targets alone cannot deliver the streamlined processes that are needed to restore the efficiency of electricity connections in Queensland.

Rather, the ideal solution is for Queensland to implement the (proven) NSW model, allowing suitably qualified contractors to install meters when they are wiring a new home, and to connect that home to the grid when they have completed the metering work.

Moreover, the proposed reforms could be done by regulation, without a lengthy Parliamentary process. Queensland would also need to establish a training and accreditation process for existing electrical contractors, so they were able to install meters and connect homes to the network. This system is already operational and effective in New South Wales and could be adapted for Queensland very quickly. We believe this process could be put in place in a matter of two to three months, and that many thousands of Queensland electrical contractors (many of whom already perform this work in other states) could be at work installing meters and connecting homes before the end of 2018.

We believe this solution will cut out the unnecessary steps that are currently clogging up the system, and allow approved electrical contractors to perform all the work while they are on the premises. This will maximise competition in the market, slash the unwanted red tape that currently surrounds the process, and give home builders real power and real choice.

3.7 Better mapping of responsibilities in State and National jurisdictions

Master Electricians Australia also believes there is a need for better “mapping” of the responsibilities between the various regulators in the State and Federal jurisdictions. We feel there is currently some doubt about which organisation is responsible for what roles and
decisions under the system, which is adding to the delays. With an array of regulators and managers overseeing the network, there is a need to codify the various responsibilities so electrical contractors, consumers and all players in the national market have clear line of sight to decision markers.

It may also be time to examine the role of the Queensland Competition Authority in regulating power prices. It may be time that this responsibility was handed over to a national authority, in line with the national nature of the electricity market.

4.0 The interaction of tariffs and innovation

One of the most critical factors in influencing consumer behaviour is the cost of electricity. This is the rationale underpinning carbon pricing and other abatement initiatives. But tariff structure can also be used to drive innovation in a market, and a lack of reform and flexibility in the tariff structure can stymie innovation. The tariff structure in place in the Queensland electricity market has been largely unchanged for 50 years or more. Master Electricians Australia firmly believes that a more flexible tariff structure would generate great innovation in the sector.

4.1 Virtual power plants

If Queensland legislation were varied to allow greater flexibility in tariffs and the retail model, the market would also likely throw up other innovative solutions to future generation demand, such as “virtual power plants”. If distributors and/or retailers were allowed, for example, to fund and manage micro-generation and storage options on private homes, and draw on these assets at peak times, it may provide enough additional capacity to avoid the need for a new power plant in the future. In fact, it’s almost certain that enough local generation capacity would eventually equal the capacity of a new peak-load generator. This approach would require changes to the tariff structure to allow the distributors and/or retailers to reward consumers for effectively handing over control of their generation and storage capacity for the use of the network – either to create capacity in times of peak demand or to protect the network in times of emergency and crisis. This would require a new and innovative approach to electricity pricing that cannot occur under the current regulations.

4.2 Micro retailers

Innovation in the Queensland market is also constrained by the fact that consumers may only buy and sell power through the regulated market. In a world where digital disruption has empowered small service providers in transport, accommodation, information technology and a range of other retail offerings, why should Queensland consumers not be allowed to choose to whom they sell their excess power? Why is it the case that the retailer can buy power from a consumer at, say, six cents per kWh, and on-sell it to their neighbour for 26 cents? In a truly competitive national market, the consumer should be able to strike a deal with his or her neighbour to sell that power for 16 cents per kWh, so both parties are better off. The technology exists today to allow these transactions, and with the widespread rollout of smart meters most households in the state will be able to participate in a micro-retail transaction
within a few years. Queensland’s regulators should act to allow this kind of competition. It will encourage greater take up of renewable energy and – importantly – battery storage as consumers move to take advantage of peak pricing. Once again, this would defer and possibly eliminate the need for additional peak generation in the foreseeable future.

4.3 The link between generation and geography

These local generation and retail options would also help to solve one of the greatest challenges for the Queensland network – the physical distance between the power generation and consumption. Localised generation is far more efficient than transmitting power long distances. Currently, decisions about generation in Queensland – or nationally for that matter – do not reflect geography, but they should. For example, a Queensland peak generator may switch on to meet a sudden demand surge on Melbourne. While the national market operates to manage both the financial and production sides of this equation, the financial transactions that underpin this decision making are not related to the needs of the Queensland market or the capacity of the grid. Future planning for electricity regulation should move to close that decision-making gap. Local demand-driven generation (or supply from batteries) is one way to address this disparity.

5.0 Distributed Energy Resource Regulator

The AMEC is currently working to create database of all the distributed energy across the country - solar, wind, micro generation, battery storage and so on. Master Electricians Australia supports this concept. As outlined above, we see a more localised and distributed generation, distribution and retail capacity as the key to innovation in the national market.

No doubt there will be those with privacy concerns, and some households who simply don’t wish to participate. Any move to record all distributed energy resources nationally must be done with great sensitivity and respect for privacy. We believe that only aggregated data should be made available from the database, to assist with future planning needs. Overall, however, we think such a resource would help to reshape the electricity market in Australia. Knowing the location of micro-generation would also be of use to emergency services personnel in times of crisis such as floods or bushfires.

6.0 Regional service obligation

One of the great challenges in a state such as Queensland is ensuring all homes and businesses have equitable access to reliable and affordable power. This equity is currently delivered in regional areas through the government-owned retailer Ergon Energy, part of the Energy Queensland group. However, Master Electricians Australia believes the role of this regional arrangement where Ergon is the monopoly supplier should be examined. Given the variety of options for power generation across the state (and particularly considering that much of the generation is physically located in regional Queensland), we see no logical reason that the regional areas of the state should be off limits to retail competition.
Maintaining this community service obligation is currently a major cost on the state network – one which is then shared across all consumers. If the State Government was concerned that consumers may pay higher prices in a fully competitive environment, it could consider applying the subsidy directly at the consumer level and allowing all retailers to compete for business.

Alternatively, if the additional cost in regional areas is due to transmission and network costs, then the state could reasonably apply a subsidy to the infrastructure, which would flow through to reduced prices in a competitive retail environment. In any event, it is time that Queensland had a fully contestable retail electricity market, for the good of both consumers and retailers.

7.0  The role of the Ombudsman

Master Electricians Australia strongly supports the role of the Energy and Water Ombudsman Queensland. We believe that, given the complicated nature of the market and its essential service nature, that consumers must have the protection of an independent complaints mechanism if they are in dispute with one or more providers in their supply chain.

However, we believe the role of the Ombudsman should defined by just a single act of Parliament – the Energy Act – for ease of access for both consumers and those organisations required to respond to the Ombudsman.

8.0  Contact details

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