

**RESPONSE TO QUEENSLAND  
COMPETITION AUTHORITY**

**Review of Electricity Pricing and Tariff  
Structures**

**Stage 2 – Draft Report**

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## 1. **INTRODUCTION**

ENERGEX Limited (ENERGEX) welcomes the opportunity provided by the Queensland Competition Authority (QCA) to comment on the *Review of Electricity Pricing and Tariff Structures Stage 2: Draft Report* (Draft Report).

ENERGEX generally supports the proposals outlined in the Draft Report. In particular, ENERGEX believes that:

- Network and notified retail tariffs should be aligned such that each notified retail tariff is matched to a single network tariff. This will help ensure that the notified retail tariff schedule does not constrain the development of network tariffs and should address the 25 MWh per annum threshold misalignment in the current notified retail and network tariffs; and
- A voluntary time-of-use (ToU) price offering is a strong step forward in the ongoing challenge to reduce peak demand on ENERGEX's network.

ENERGEX is happy to work with the QCA in the development of the new notified retail tariff schedule should this be required.

## 2. **ASSESSMENT OF EXISTING TARIFF STRUCTURES**

ENERGEX makes the following comments in regards to the Draft Report's assessment of existing notified tariff structures:

- ENERGEX supports the QCA's proposal to consolidate and remove a number of existing notified tariffs. ENERGEX notes that a number of these amendments were recommended to the QCA in our previous submission to this Review;
- ENERGEX agrees that cross-subsidies between customers and between groups of customers exist within the current notified retail price schedule and supports the QCA's desire to reconstruct the tariff schedule to only contain cost reflective regulated retail tariffs. ENERGEX's existing network tariff suite would be a worthwhile starting point for this exercise. ENERGEX considers its 2009-10 network tariffs to be cost-reflective and they have been approved as such by the QCA;
- ENERGEX believes that a customer's capacity requirement is a better indicator of its network costs than the type of customer. ENERGEX therefore agrees with Origin Energy's suggestion (noted on page 26 of the Draft Report) that any alignment of retail and network tariffs should be based on consumption (which could be considered a surrogate for required capacity) rather than customer class. This approach is consistent with ENERGEX's tariff selection process in the network tariff schedule;
- ENERGEX agrees that the retail fixed charge should reflect the fixed costs of supplying electricity faced by retailers;

- In regard to small customer connections, ENERGEX notes that its costs are not sensitive to consumption in the short run and could be considered fixed costs in this sense. In addition, the fixed charges reflected in ENERGEX's network charges do not reflect the short run fixed costs incurred by ENERGEX. The fixed component of network charges only reflects the fixed connection asset costs. Short run shared network costs are fixed costs and are recovered through variable network charges;
- ENERGEX seeks clarification of the Draft Report's comment that there are multiple ENERGEX network tariffs that apply to similar customers who consume above and below the 25 MWh per annum consumption threshold. ENERGEX considers that there is only a single overlap – between network tariffs 8500 (Business Small) and 8400 (Domestic); and
- The flexibility of the notified retail tariff schedule to changes in network tariffs (which may occur from time-to-time) could be improved. ENERGEX believes that, should a material change be made to the suite of network tariffs, that a complementary notified retail tariff be considered for implementation at the appropriate time.

### **3. VOLUNTARY RESIDENTIAL ToU TARIFF**

The Draft Report notes the potential for a voluntary opt-in ToU tariff for residential customers with interval meters. ENERGEX strongly supports the consideration of such a tariff. ENERGEX acknowledges that for a residential ToU retail price to be implemented, the QCA must first address the issues listed in section 5.3 of its Draft Report. In order to facilitate a transparent and informed consideration of these issues, ENERGEX provides comments on each.

*Issue 1: Implementing the necessary changes to the NEM Metrology procedure for Queensland required to removing the restriction of reading interval meters as accumulations.*

Clause 3.3.3A of the NEM Metrology Procedure provides that, for Queensland, an interval meter installed at a connection point where the flow of electricity is less than 100MWh per annum will be read as an accumulation meter unless the metering installation is classified as types 1 to 4.

Approximately 200,000 small customer connections and all new customer connections in ENERGEX's region have meters that are both ToU and profile capable and are read as accumulation meters. These meters would not require a metrological change if they were re-programmed to display ToU for ToU tariffs and read manually as they are still being read as an accumulation meter. ENERGEX commenced the procurement of three-rate ToU capable meters in significant numbers in 2005. All meters currently procured by ENERGEX are capable to be programmed with three-rate ToU data displayed and can be read as an accumulation meter.

However, if the decision was to use profile data for ToU tariff determination, then these meters would become either type 4 or type 5 meters depending on whether they are manually or remotely read. A review of clause 3.3.3A of the NEM Metrology Procedure may be required if they were to become type 5 meters.

ENERGEX also takes this opportunity to recognise that around 200,000 domestic customers in ENERGEX's region already have interval meters installed. A domestic customer who opts-in for the proposed tariff will require their interval meter to be re-programmed or, if they have an accumulation meter, an interval meter installed. Cost recovery principles should reflect the opt-in nature of the tariff and would need to be sensitive to future developments in the status of smart metering in Queensland.

*Issue 2: Defining the number of time dependant pricing bands and the time period of each band.*

ENERGEX considers that a voluntary ToU tariff structure is the first stage in the provision of appropriate network pricing signals to customers and in this context allows customers to make informed consumption and investment decisions. ENERGEX acknowledges that the implementation of a relatively simple ToU tariff structure may not provide explicit incentives to shift 'lifestyle' consumption from peak periods. However, the proposed ToU tariff is an important step in the continued enhancement of cost reflective residential tariffs. In this regard ENERGEX also notes that:

- The ToU tariff is proposed to be opt-in, which allows customers who can not or do not wish to assess the desirability of the tariff for their situation to remain on Tariff 11; and
- It would be feasible to allow customers to revert back to Tariff 11 should the customer no longer consider the ToU tariff to be optimal.

The structure should also be designed to enable customers to assess price signals within the tariff structure and time their consumption accordingly should they wish. A two rate ToU tariff may provide an acceptable level of differentiation for peak and off-peak price signals to be sent to customers, and would be relatively simple to understand. However, ENERGEX considers that a three-rate ToU structure should also be considered as this would increase the ability for residential customers to optimise the benefits of a ToU tariff structure and allow ENERGEX to send a more advanced price signal to residential customers. ENERGEX notes that:

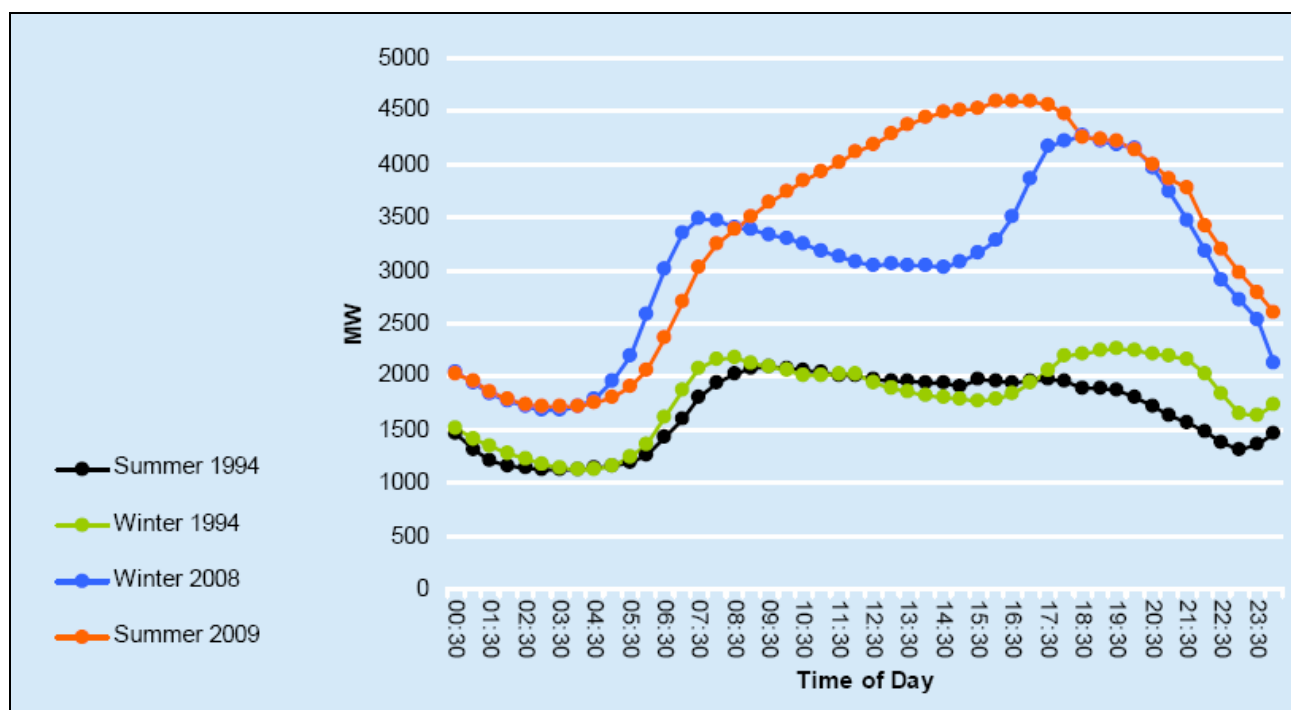
- The ability for residential customers to assess their suitability for a three-rate tariff should not be underestimated. It should be recognised that residential customers can already opt for a multi-rate tariff offering through the availability of Tariff 31 and Tariff 33 in addition to Tariff 11;
- Retailers in other States offer three-rate ToU pricing for small residential customers. For example EnergyAustralia's New South Wales retail customers can benefit from a "PowerSmart Home" tariff which includes differential peak, off-peak and shoulder prices; and
- Should complexity remain a concern, the third or "shoulder" period could have the same retail and network price as the peak or off-peak period (depending on the timing of the periods) for 2010-11 to allow customer exposure to the concept of shoulder pricing and transition to full differential three-rate pricing from 2011-12.

*Issue 3: Whether different prices should apply in different seasons*

Peak demand on an electricity network generally occurs either in the coldest part of winter or the hottest part of summer. ENERGEX’s network changed from winter peaking to summer peaking in the early 2000s. Summer peaking demand has a compound effect on the distribution network as network components such as transformers and cables have lower capacity ratings on hot days, reducing their ability to carry high loads.

In recent years, the load shape at times of peak demand on ENERGEX’s network has been a long, flat curve during summer that grows in the morning and steadily increases until about 5.00pm when temperatures cool and the load gradually declines (see Figure 1). In the modern summer load shape, the underlying residential characteristics of normal daily household routines still exist. However additional factors such as residential (on a hot summer day), large Commercial and Industrial (C&I) customer flat load profiles and the proportion and timing of Small to Medium Enterprises’ (SME) load (mainly between 7.00am and 5.00pm) are now of increased significance.

**Figure 1: Daily Load Curve**



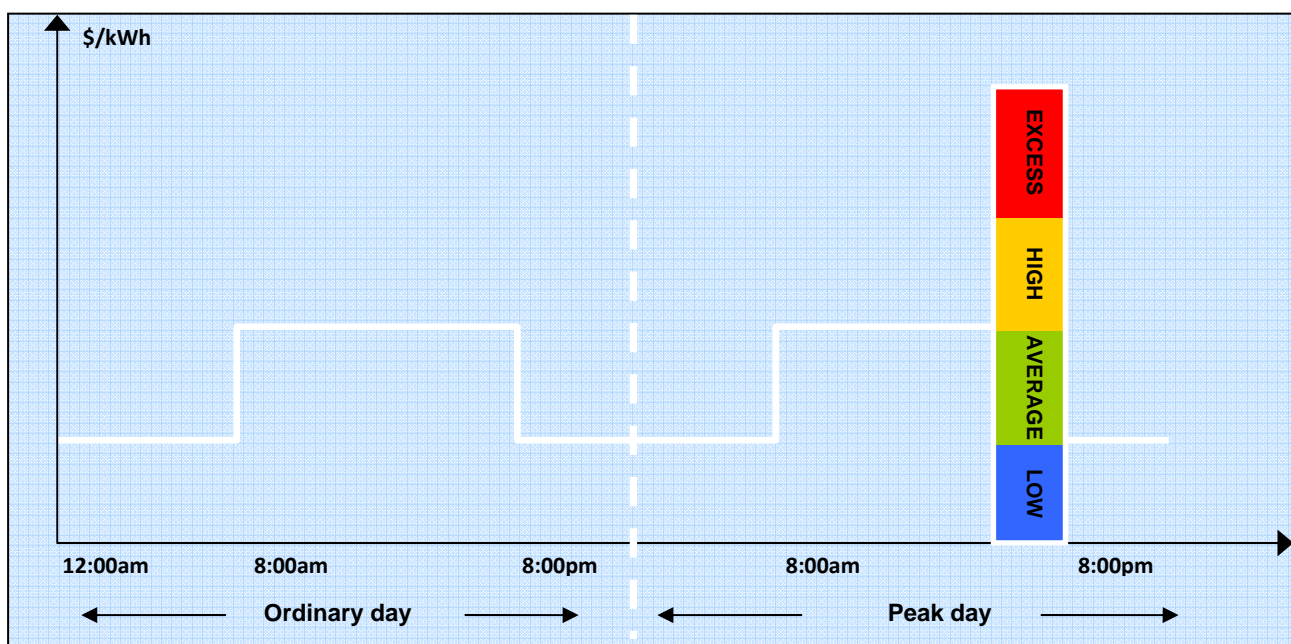
The ability to send customers appropriate price signals in different seasons, and particularly in summer, would clearly be of significant benefit to ENERGEX. A seasonal ToU residential tariff would strongly support ENERGEX’s demand management initiatives and allow customers to optimise their consumption patterns. For example, a seasonal element can apply for the entirety of the summer period, or be directly targeted at the hottest summer days (dynamic peak pricing).

However, ENERGEX considers that introducing a seasonal element into residential notified prices may be challenging given that such a structure would add complexity to the notified tariff schedule.

In addition, it may be sub-optimal to implement such a significant change to the notified tariff if the change is to be introduced as early as 1 July 2010.

ENERGEX does note that it will undertake time-varying tariff trials (combination of ToU and dynamic peak pricing) and measure customer response as well as impact on the network under a Rewards-Based Tariff Initiative. The Rewards-Based Tariff (RBT) initiative is a cooperative project between ENERGEX and Ergon Energy that is being undertaken as part of the Energy Conservation and Demand Management group of initiatives. The first signals are intended to be sent to participating customers from summer 2011. Consumption above “baseload” levels on critical days would face an above-peak price, while consumption below “baseload” levels would be charged a below-peak price. Following the trials the results will be used to analyse the responsiveness of customers to dynamic peak pricing and reward based tariffs.

**Figure 2: Reward Based Tariffs**



*Issue 4: What network tariffs would complement the signals sent by time dependant pricing bands*

ENERGEX supports the alignment of network and retail tariffs. If there is to be a notified residential ToU tariff ENERGEX believes that, to ensure that the desired price signal is received by customers, it should be based on a network residential ToU tariff.

ENERGEX’s current network tariff 8700 is the Business Small ToU tariff and is a simple peak/off-peak ToU tariff. This was modelled from the same data from which the domestic energy only network tariff (tariff 8400) is generated. While the terms and conditions associated with network tariff 8700 do not restrict its application to domestic customers, ENERGEX would be willing to propose the renaming of this tariff (with the potential for conversion to three-rate ToU tariff subject to the outcomes of this Review) to the Australian Energy Regulator (AER) for 2010-11. This could act as the relevant network tariff.

*Issue 5: The price differentials required between pricing bands to act as an incentive for customers to shift consumption away from peak periods*

As mentioned, should the QCA propose to introduce a voluntary ToU tariff, ENERGEX would be willing to propose a matching ToU network tariff as part of its network pricing proposal to the AER for 2010-11. ENERGEX envisages that this process would include an analysis of the price differentials required between pricing bands that would help achieve the demand management objectives.

*Issue 6: The Authority would prefer to keep a voluntary residential ToU relatively simple as most residential customers in Queensland have had no previous exposure to ToU pricing.*

ENERGEX considers that the ability of customers to interpret and evaluate different electricity pricing structures should not be underestimated. Customers are faced increasingly complex retail offerings in a number of different industries, such as telecommunications and insurance. ENERGEX also notes the success of Tariffs 31 and 33, which in combination with Tariff 11 could be considered a form of three-rate ToU pricing structure.

In addition, ENERGEX notes that the Queensland Government's ClimateSmart Initiative encourages eligible residential customers to request the installation of a wireless power monitor in their home. The monitors have in-built three-rate ToU capability. On 17 September 2009 the Queensland Government announced that the ClimateSmart Home Service had reached 100,000 Queensland households, and it is anticipated that 200,000 Queensland residences will have received a Home Service by October 2011.<sup>1</sup> The increasing uptake of initiatives such as the ClimateSmart Home Service will facilitate customer education of ToU electricity pricing

ENERGEX recognises that the introduction of a ToU notified price for residential customers would require a focussed and thorough customer education plan. ENERGEX is committed to constantly engaging and communicating with its customers on all matters affecting their electricity supply, including network pricing. In this regard ENERGEX notes that it is currently finalising its preliminary discussion paper on the development of network tariffs for 2010-11. This document has been produced annually by ENERGEX and will be available for comment by interested parties.

#### **4. INCLINING BLOCK TARIFFS**

In an ideal world customers would pay according to the demand imposed on the network, particularly during the peak. However, this is not possible with simple accumulation meters. ENERGEX considers that an inclining block structure for the small residential non-ToU retail tariff would be an appropriate interim transitional measure because, as a general rule, high consumption customers will probably be running air-conditioners during the peak period and should therefore contribute proportionally more to the cost of the network. As noted in the Draft Report, inclining block tariffs are offered by retailers in New South Wales, South Australia and the Australian Capital

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<sup>1</sup> QLD Minister for Climate Change and Sustainability, "100,000 homes declare war on bills and climate change", media release, 17 September 2009.

Territory. ENERGEX notes that ActewAGL Retail offers small residential customers a flat rate, inclining block and ToU tariff depending on the available meter.

In addition inclining block tariffs can act as an incentive for high use customers to both reduce consumption and to request the installation of a ToU meter so that they may tailor their consumption patterns and potentially reduce costs by changing their usage patterns to avoid peak periods. In this way an inclining block structure domestic tariff would complement a voluntary domestic ToU tariff.

## 5. INTERRUPTIBLE TARIFFS

ENERGEX has found that interruptible tariffs and/or individual load control devices in managing customer demand during peak demand periods has been of significant benefit to residential customers in South-East Queensland. The Draft Report comments on a number of important issues regarding interruptible tariffs to which ENERGEX wishes to respond.

Firstly, the Draft Report states that retailers should not be adversely impacted by the use of interruptible tariffs or direct load control devices. In terms of energy costs, ENERGEX notes that retailers settle its wholesale energy purchases using the Net System Load Profile (NSLP) and therefore disruptions to supply should not disadvantage retailers. In terms of network costs, ENERGEX previous submission noted that the price structures between the corresponding retail and network should align.

Secondly, the Draft Report notes retail tariffs should complement the up-take of interruptible tariffs. ENERGEX's submission to the Stage 2 Request for Comments Paper noted that the relationship between the minimum payment (currently being reconsidered by the QCA) and variable components of Tariffs 31 and 33 compared to Tariff 11 should also be reassessed having regard to the equivalent network tariffs. The variable rate issue is highlighted in Table 1, which indicates the strong signal in the network controlled load tariffs being diminished in the corresponding notified retail price.

**Table 1: Consumption rates across domestic and controlled load network and retail prices (c/kWh)**

	Network Tariff	Retail Tariff
Domestic / T11	6.964	17.13
Controlled 1 / T31	1.124	6.99
Disparity	6.2 times	2.5 times

ENERGEX considers that this issue should be considered during the process of re-designing the notified tariff suite.

Finally, the Draft Report notes that where network businesses introduces new interruptible tariffs that require changes to network tariffs, such charges be able to be passed through to retail tariffs

(or new retail tariffs constructed) without adversely impacting retailers. ENERGEX supports this view which is consistent with ENERGEX's more general position that each retail tariff should align to a single network tariff.