



**Request for Comments Paper**

**Review of Electricity Pricing and Tariff  
Structures – Stage 2**

**September 2009**

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## SUBMISSIONS

Public involvement is an important element of the decision-making process of the Queensland Competition Authority (the Authority). The Authority is releasing this Request for Comments Paper to start the second stage of its *Review of Electricity Pricing and Tariff Structures*. The issues on which comments are sought are not meant to be exhaustive and the Authority will consider all submissions received by the due date.

Written submissions should be sent to the address below. While the Authority does not necessarily require submissions in any particular format, it would be appreciated if a printed copy is provided together with an electronic version on disk (Microsoft Word format) or by e-mail. Submissions, comments or inquiries regarding this paper should be directed to:

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**The closing date for submissions is 2 October 2009.**

For further enquiries contact Zaeen Khan on (07) 3222 0565.

### Confidentiality

In the interests of transparency and to promote informed discussion, the Authority would prefer submissions to be made publicly available. However, if a person making a submission does not want that submission to be public, that person should claim confidentiality in respect of the document (or any part of the document). Claims for confidentiality should be clearly noted on the front page of the submission and the relevant sections of the submission should be marked as confidential, so that the remainder of the document can be made publicly available. It would also be appreciated if a printed copy and electronic copy of each version of these submissions (i.e. the complete version and another removing confidential information) could be provided. Where it is unclear why a submission has been marked “confidential”, the status of the submission will be discussed with the person making the submission.

While the Authority will endeavour to identify and protect material claimed as confidential as well as exempt documents (within the meaning of the *Freedom of Information (FOI) Act 1989*), it cannot guarantee that submissions will not be made publicly available. As stated in s187 of the *Queensland Competition Authority Act 1997* (the QCA Act), the Authority must take all reasonable steps to ensure the information is not disclosed without the person’s consent, provided the Authority is satisfied that the person’s belief is justified and that the disclosure of the information would not be in the public interest. Notwithstanding this, there is a possibility that the Authority may be required to reveal confidential information as a result of an FOI request.

### Public access to submissions

Subject to any confidentiality constraints, submissions will be available for public inspection at the Brisbane office of the Authority, or on its website at [www.qca.org.au](http://www.qca.org.au). If you experience any difficulty gaining electronic access to documents please contact the Authority on (07) 3222 0555.

Information about the role and current activities of the Authority, including copies of reports, papers and submissions can also be found on the Authority’s website.

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## 1. INTRODUCTION

On 25 June 2009, the Premier and the Treasurer (the Ministers) directed the Authority to review electricity pricing and tariff structures in Queensland with a view to having a new retail electricity pricing framework in place from the commencement of the 2010-11 tariff year.

A copy of the Direction and a letter from the Minister for Mines and Energy is available from the Authority's website at [www.qca.org.au](http://www.qca.org.au).

### 1.1 The review progress to date

Consistent with the requirements of the Direction, the review is being conducted in two stages, as follows:

#### *Stage 1 (completed)*

- (a) Part A: review the Benchmark Retail Cost Index (BRCI) methodology that currently exists in Queensland and alternative pricing methodologies that could be considered to reflect the costs of supplying electricity including network costs and accounting for all State and Commonwealth Government environmental obligations.
- (b) Part B: review existing electricity tariff structures and assess whether current tariffs are fully cost reflective (for South East Queensland consumers), provide appropriate price signals to enable customers to understand and manage their consumption, or facilitate effective retail competition, and whether any tariffs are obsolete.

#### *Stage 2 (to be completed by 30 November 2009)*

- (a) Review alternative retail tariff structures which may assist in the long term management of peak demand and provide an incentive for customers to use electricity more efficiently.

The Authority released its Final Report on Stage 1 of the review on 8 September 2009.

The Authority is now commencing Stage 2 of the review.

### 1.2 Matters to be considered in Stage 2

Stage 2 of the review requires the Authority to examine alternative tariff structure options that:

- (a) support cost reflective tariffs; and
- (b) encourage more efficient use of electricity, including encouraging demand-side management.

In undertaking this review, the Authority is required to consider:

- (a) the level of tariff necessary to promote competition for each customer class;
- (b) (and identify) the impact of changing tariff structures on different classes of customers;
- (c) the merits/issues associated with the introduction of:
  - (i) inclining block tariffs;
  - (ii) peak demand or time-of-use pricing; and

- (iii) additional interruptible tariffs suitable for demand-side management.
- (d) the timing issues associated with the implementation of any proposed changes to tariff structures and to make recommendations about any transitional arrangements.

### 1.3 Review process for Stage 2

To assist stakeholders in preparing submissions, this Request for Comments Paper sets out a range of matters about which the Authority is seeking information and comment. However, the range of matters is not exhaustive and interested parties are invited to raise and discuss any other issues relevant to for Stage 2 of the review

Further comments will be sought after the Authority has released its Draft Report.

The Authority is required to submit its Final Report on Stage 2 of the review to the Government by 30 November 2009.

The indicative timetable for this stage of the review is as follows:

**Table 1: Stage 2 Indicative Timetable – Review of alternative tariff structures**

<i>Task</i>	<i>Indicative Timetable</i>
Release Request for Comments Paper	11 September 2009
Submissions on Request for Comments Paper close	2 October 2009
Release Draft Report	Late October 2009
Submissions on Draft Report close	Early November 2009
Final Report to Government by	30 November 2009

Details for making submissions can be found at the front of this Paper. The closing date for receipt of submissions is 2 October 2009.

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## 2. ISSUES FOR COMMENT

### 2.1 Alternative tariff structures to support cost reflectivity

In its Final Report on Stage 1, the Authority concluded that the existing notified prices are unlikely to fully reflect the costs of supply, at least not for each individual tariff group. In reaching this conclusion, the Authority noted that:

- (a) the BRCI methodology currently used to set the notified prices focuses on measuring the change in the costs of supplying electricity, rather than determining the actual costs of supply;
- (b) prices were unlikely to have been cost reflective when the BRCI methodology was put in place;
- (c) the BRCI methodology may actually have contributed to a further deterioration in the cost reflectivity of tariffs; and
- (d) confidential information received from retailers suggested that the level of headroom that existed in the tariffs at the commencement of FRC had deteriorated over recent years.

The Authority also noted that the structure of the tariffs is critical to achieving better cost reflectivity. True cost reflectivity would require that customers receive direct information about prevailing wholesale electricity market prices and pay prices calculated by reference to the variable market price.

However, for a majority of residential and small business customers, options for alternative tariff structures are somewhat limited in the shorter term as these customers typically have accumulation type meters that do not differentiate when consumption occurs (peak or off-peak periods) and so the ability to consider alternative tariffs that directly target consumption during peak and off-peak periods is limited.

As there is currently no plan on the part of either the Government or the distributors to roll-out smarter meters, the Authority proposed a second best option, being the adoption of tariff structures that provide at least some of the features of a true cost reflective tariff. Possible aspects of such an approach were identified as:

- (a) directly pass through of network costs;
- (b) prices calculated by reference to the (bundled) energy costs and retail costs actually likely to be incurred by retailers when providing retail electricity services to customers under those tariffs;
- (c) some cost reflectivity, such as sending time of use (peak or off-peak) pricing signals;
- (d) ceasing to provide perverse price signals, such as those sent by some declining block tariffs; and
- (e) making other changes to the eligibility for various tariffs to complement time-of-use tariffs and providing better access for consumers to the incentives available from paying prices that are closer to cost reflective.

An approach with these characteristics would require changes to the makeup of individual tariffs (the way that the cost components underlying each tariff are identified and accounted for) as well as to the structure of the existing tariffs (the suite of different tariffs that presently exist in the notified tariff schedule).

### *The makeup of individual tariffs*

The Authority identified the separate cost components underlying the individual regulated tariffs in Stage 1. When setting notified prices, the manner in which these cost components are identified and accounted for is critical in achieving better cost reflectivity.

The Authority also agreed with stakeholders that the direct pass through of the network cost component was appropriate. At the same time, the Authority was of the view that there must be a mechanism that allows the price actually payable by retail customers to be easily determined. The Authority therefore recommended that the published notified price should include both retail and network components, albeit separately identified. At the same time, the Authority noted that such an approach would lead to the duplication of retail tariffs whenever different network tariffs applied to different customers on the same retail tariff.

The Authority also noted that, with network and retail components of notified prices being separately determined, there is the potential for contradictory signals to be sent to customers when different approaches are being implemented by retailers and distributors, and that this issue will require on-going consideration and co-operation between retailers and distributors.

### **The Authority seeks stakeholders' comments on the following:**

- **Do the fixed charges currently specified in the existing tariffs reflect the fixed costs incurred by retailers (other than network costs) when supplying retail electricity services to customers on those tariffs, including customers with little or nil consumption?**
- **If not, which of the existing tariffs have fixed charges that are the closest to cost reflectivity and which fixed charges are the furthest from cost reflectivity?**
- **Should the retail (non-network) prices include a fixed cost component as well as a variable cost component?**
- **What alternatives, if any, are available for aligning network tariffs with retail tariffs?**

### *The suite of tariffs available to customers*

The characteristics of the different tariffs in the current tariff schedule were outlined in the Authority's Final Report on Stage 1.

In it, the Authority noted that, of the 20 tariffs available at present, there are six distinct types or classes of tariff structures:

- (a) *Declining block tariffs*: where the per unit price of electricity decreases as consumption increases;
- (b) *Flat rate consumption or "anytime" tariffs*: where the per unit price of electricity remains constant regardless of the level of electricity consumed;
- (c) *Time of use tariffs*: where the per unit price of electricity is higher during specified peak times and lower during off-peak times;
- (d) *Controlled load tariffs*: where the electricity supplied on these tariffs is only available for certain "hard-wired" appliances for a set period or duration each day;

- (e) *Demand dependent tariffs*: these tariffs are designed for customers who require electricity with certain characteristics, such as electricity supplied at a higher or lower voltage; and
- (f) *Tariffs for unmetered supply*: these tariffs cater for a number of unmetered loads and temporary services (such as traffic signals and watchman lights) and are charged according to the rated capacity of the installed equipment.

The majority of customers on notified prices are residential customers on Tariff 11. This tariff has a small fixed charge component and a single flat rate per kWh of energy consumed. Some residential customers are also on either of the two controlled load tariffs (Tariff 31 or 33), generally for supply to their hot water connections. Other than these tariffs, all other tariffs are primarily designed for business, irrigation or farming customers.

**The Authority seeks stakeholders' comments on the following:**

- **Which of the existing tariffs are closest to achieving cost reflectivity and why?**
- **Which of the existing tariffs are furthest from achieving cost reflectivity and why?**
- **Is the existing schedule of tariffs sufficient to achieve cost reflectivity or should further tariffs be added (or deleted)?**
- **What types of tariffs would ideally be included in the tariff schedule?**
- **Regarding the conditions that restrict the uptake of certain regulated tariffs, are there any conditions that should be changed or relaxed to allow or encourage more customers to take advantage of time-of-use tariffs, controlled load tariffs or other types of tariff that may be considered more cost reflective?**

*Promoting competition across classes of customers*

In assessing the options for new electricity tariff structures, the Authority must consider the level of notified prices necessary to promote competition for each customer class.

The role of notified prices appears to be that of a safety net in those areas where competition is present, so that customers can access electricity irrespective of their level of attractiveness to retailers as a market customer. However, as noted by the Authority in the Final Report on Stage 1, while notified prices may act as a safety net for customers in South East Queensland, notified prices for customers in Ergon Energy's distribution region is generally the only price available to them due to lack of competition.

In South East Queensland, the notified tariff effectively sets the benchmark against which retailers must compete to secure market customers. To this end, it is important that notified tariffs should at least be cost reflective as this would have the effect of facilitating further retail competition, firstly, by increasing the transparency of the cost inputs that make up the tariffs, and secondly, by allowing for cost reflectivity and recovery of costs caused by the use of a particular customer category.

**The Authority seeks stakeholders' comments on the following:**

- **Is there a greater level of retail competition evident for certain classes of customers? If so, what makes these types of customers more attractive for competition?**
- **Are certain classes of customers, on average, currently on tariffs closer to cost reflectivity than others? Why?**

- **How should the Authority best determine the prices necessary to promote competition for each customer class?**
- **If prices are made costs reflective, are there any reasons why notified prices should not be retained for small and/or large business and commercial customers?**

*The removal and consolidation of tariffs*

In the Final Report on Stage 1, the Authority identified three tariffs that were “obsolete” (closed to new customers) - tariffs 37, 63 and 64 which in 2008 accounted for 0.07% (or 1,531) of all Queensland customers.

The Authority also suggested in its Final Report on Stage 1 that tariffs with similar underlying costs could be consolidated to provide a smaller number of well-targeted tariffs which would be more effective in encouraging efficient use of electricity.

**The Authority seeks stakeholders’ comments on the following:**

- **Should the three existing tariffs that are labelled obsolete in the tariff schedule be removed, and if so, what are the implications of doing so?**
- **What criteria should be used to consider which tariffs to consolidate?**
- **Which of the existing tariffs should be consolidated?**

## **2.2 Alternative tariff structures to encourage efficient use of electricity**

The review requires the Authority to examine alternative tariff structure options that can encourage more efficient use of electricity, particularly demand management. In doing so, the Authority is expressly required to at least consider the merits/issues associated with the introduction of the following type of tariff structures:

- (a) inclining block tariffs;
- (b) peak demand or time of use pricing; and
- (c) additional interruptible tariffs suitable for demand-side management

Encouraging the efficient use of electricity requires consumers to be aware of the cost of their consumption, particularly during peak and off-peak times, and be able to take action to manage their consumption accordingly.

During periods of peak demand, not only do retailers incur higher costs of purchasing energy but networks also face capacity issues in delivering the electricity being consumed. An unattractive feature of many of the current tariffs is that they either send the same price signal to customers regardless of their pattern of consumption or, in some cases, send perverse price signals that encourage consumption in peak demand times.

In principle, prices that vary according to an individual customer’s time of consumption would best reflect the costs imposed on the retailer for the additional purchase of energy. Such an approach should also reveal to the customer the network costs associated with the time of their consumption. Peak and off-peak consumption pricing and network capacity pricing would therefore provide customers with pricing signals regarding the costs of their consumption.

However, peak and off-peak pricing may impact differently upon certain classes of customers. For instance, peak consumption charges will impact more on customers who are less able to shift their electricity consumption patterns.

**The Authority seeks stakeholders' comments on the following:**

- **What should be the relevant considerations when choosing alternative tariff structures that promote demand management and energy efficiency?**
- **What impacts will peak and off-peak pricing have on various customer classes? What classes of customers are likely to be affected most?**
- **To what extent could network tariff reforms better address demand management objectives rather than retail tariff reform?**
- **How should the Authority ensure that the structure of tariffs does not impede the existing initiatives of distributors in managing peak demand?**

*Inclining block tariffs*

An inclining block tariff structure is characterised by setting the kWh unit rate for each succeeding block of usage at a higher rate than the previous block of usage. Such a tariff structure would see customers paying:

- (a) an initial price per kWh for energy consumed up to some prescribed threshold level of consumption; and
- (b) a higher price per kWh for energy consumed above the threshold (there can be more than one additional block)

Without the ability to differentiate between peak and off-peak consumption, inclining block tariffs tend to be a somewhat blunt instrument for addressing demand management issues. Demand management is driven by the objective of reducing the gap between daily and annual maximum demand (peak) and minimum demand (trough). An inclining block tariff will discourage total consumption regardless of whether consumption is occurring in peak or off-peak times. It will penalise equally customers consuming large amounts of electricity in high cost peak periods and customers consuming the same amounts of electricity in low cost off-peak periods, yet one of these customers contributes to the problem while the other contributes to the solution.

The choice of threshold for the second (and subsequent) blocks of consumption will be a key factor in determining how many customers are affected by an inclining block tariff. The higher the block threshold, the fewer customers that would face higher bills and have an incentive to alter their consumption.

**The Authority seeks stakeholders' comments on the following:**

- **Would the introduction of an inclining block tariff structure deliver significant benefits (in terms of more efficient use of electricity and reduced peak demand) by itself?**
- **Would an inclining block tariff structure be more suited to some tariffs than others? Which ones?**

- **What thresholds would be appropriate for each of these tariffs in order to provide appropriate pricing signals?**

*Peak demand and time-of-use pricing*

Peak demand and time-of-use based tariff structures require customers to have a more sophisticated meter than the standard accumulation meters currently installed for most residential and small business customers. More recent meter designs use an interval meter or smart meter that records consumption in half-hourly increments or at least for two time periods. Widespread application of tariffs based upon time-of-use will not be possible unless time-of-use metering were to be rolled out to the majority of residential and small business customers. A more widespread roll-out of time-of-use metering would likely require an assessment of the costs and benefits of doing so.

**The Authority seeks stakeholders' comments on the following:**

- **How widely available are time-of-use meters and to what types of customers?**
- **Would the availability of peak pricing and time-of-use tariff structures deliver significant benefits (in terms of more efficient use of electricity and reduced peak demand) given the existing availability of the required metering?**
- **Should time-of-use metering be encouraged and, if so, how?**

*Interruptible tariffs*

This type of tariff structure typically provides customers with electricity for a given period of time each day at a lower per unit charge. Distributors have the ability to interrupt supply to coincide with periods of higher congestion on their networks. This type of services is currently available for certain "hard wired" appliances such as hot water systems and is generally used in addition to an "always on" service that meets the customer's general electricity requirements. The purpose of hardwiring the appliances is to ensure that customers cannot make supply available (to that appliance) under a different tariff when the distributor interrupts supply over the peak demand.

Currently, Tariff 31 and 33 are the only interruptible tariffs available and hardwiring of appliances is a mandatory condition. However, the Authority notes that trials are currently being conducted by Energex as part of its Cool Change - Energy Smart Suburbs trial, to test the effectiveness of installing individual control devices to certain appliances (e.g. pool pumps and airconditioners) enabling them to be remotely cycled by the distributor over the peak demand without the need to hard wire the appliances.

**The Authority seeks stakeholders' comments on the following:**

- **How effective are interruptible tariffs and/or individual control devices in managing customer demand during peak demand periods?**
- **To what extent have customers in each distribution area that have the capacity to access an interruptible tariff taken up the option?**
- **What types of consumption would be suitable for interruptible tariffs and/or individual control devices?**
- **What are the metering requirements for hard wired appliances and those using individual control devices**

- **Would a wider availability of interruptible tariffs and/or individual control devices enabling remote load control be an effective means of managing periods of peak customer demand? Which would it be more cost effective?**

*Other demand management initiatives*

Pricing initiatives are one mechanism used to encourage more efficient use of electricity by customers. Distributors also undertake non-pricing initiatives to ameliorate the impacts of peak demand on network capacity. Ideally, any tariff structure should not impede the other initiatives of distributors aimed at managing peak demand.

Any alternative tariff structure designed to manage demand should complement other demand management initiatives to achieve an integrated approach to overall peak demand management.

**The Authority seeks stakeholders' comments on the following:**

- **What other demand management initiatives are being undertaken by industry?**
- **Are such schemes capable of being integrated with any of the identified alternative tariff structures?**
- **Are alternatives to the existing tariff structures necessary for such other demand management initiatives to be successful?**

### **2.3 Transitional arrangements and future options**

Metering availability is one barrier to introducing more innovative and cost reflective tariff structures. For example, customers opting for off-peak or time-of-use tariffs would require installation of meters with time-based consumption recording technology.

The Authority could consider an approach that will allow or complement the future use of smart meters and similar technology by a larger portion of customers.

The Authority is also mindful that transitional arrangements or grace periods may be required to assist customers to react to any changes in the structure of the available tariffs.

**The Authority seeks stakeholders' comments on the following:**

- **How should the Authority ensure that the structure of the notified tariffs will allow or complement the future use of smarter meters and similar technology?**
- **What transitional arrangements should the Authority consider to allow customers affected by any change the opportunity to respond to any changes that result from tariff restructure and the introduction of cost reflective tariffs?**