

**MINISTERIAL COUNCIL ON ENERGY
STANDING COMMITTEE OF OFFICIALS**

**IMPROVING USER PARTICIPATION IN THE
AUSTRALIAN ENERGY MARKET**

SUBMISSION BY ORIGIN ENERGY

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Demand Side Response (DSR)

Since the start of the NEM, Origin Energy has actively pursued DSR opportunities with its customers. Currently, almost 60MW of DSR is available through the collective offerings of our larger customers. Origin's experience in the market is that some customers have flexible operations that allow them to offer demand reductions and share in the benefits of market volatility. However, the bulk of our customer base values an uninterrupted power supply to their businesses or homes and do not see the potential benefits of demand side response as offering sufficient value to justify participation. Origin contends that any lack of participation does not necessarily justify a regulated response.

It should also be pointed out that during this period of relatively low and stable wholesale market prices in the NEM, it should not be of concern if participation in demand side is lower than what might otherwise be expected. Origin's experience is that most interest in DSR occurs during times of high price volatility and can act as an effective response to obviate the effect of the volatility on a retailer's position and on the consumer's cost of energy.

The fact that DSR already exists for large users indicates that there is effective competitive in the wholesale market. The fact that DSR does not flourish in the retail market shows that under an environment of price regulation, DSR is not feasible because the benefits cannot be materialised in a cost effective way due to the lack of innovative pricing structures.

Pay-as-bid

Origin agrees with SCO's recommendation that it is not useful to pursue the pay-as-bid proposal as a viable option because of the complexity and costs of settlement and dispatch. The complexity arises firstly from the difficulty of comparing demand side offerings that differ in their firmness, duration and notice required, and secondly integrating the demand-side stack with the supply-side stack. Following this is the uncertainty surrounding the cost of the levy required to fund the proposal and the inability for this to be hedged by retailers.

Aggregation

DSR is typically arranged as a negotiated part of the contract between the retailer and the customer. In supplying electricity to a customer, a retailer agrees to hedge the customers' exposure to fluctuations in spot prices and becomes financially responsible for the settlement of the meter through the NEM. It is therefore not possible for demand side response to be offered to another market, such as an aggregator facility, outside of the retailer-customer relationship.

Origin has reservations about the practicalities of implementing an aggregation approach to DSR. The approach is flawed because it sums responses across parties that have fundamentally different contractual interests. Our observations are based on our experiences participating in the EUAA aggregation trial.

The aggregation approach cannot match supply of DSR from consumers and demand from retailers in a cost effective way. The very nature of aggregating DSR across consumers who are linked to different retailers creates a range of contractual problems since the benefit of DSR goes to the retailer that the consumer is linked to, whether or not they want the DSR, not necessarily to the retailer that buys the DSR. Settlement of benefits would be extremely complex and costly.

Origin does not consider that there is a role for government in aggregation. The lack of aggregating facility to date shows that there is insufficient commercial incentive for an aggregator to be set up; evidence that retailers and customers are reaching mutually satisfactory arrangements on the sharing of DSR benefits between them. Government

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intervention into mutually agreed contractual relationships is not warranted, and would only act to further distort the energy market.

Education Campaign

There is a role for governments in providing information to customers about their energy options, including access to subsidies and how to reduce their bills.

Impediments to DSR

Large end users

The main reason why DSR does not happen more frequently amongst large end users is that the costs for firms in participating in DSRs are relatively large. Thus, the price and volatility of energy must reach a high level before DSR becomes attractive. Most firms find that the costs from a potential interruption to their production processes at the relevant time far outweigh the benefits of DSR. Even for firms that find there are net savings to be made from interrupting or shifting supply, most firms do not have the flexibility to respond as rapidly as the energy market requires. There are other costs involved for the firm in turning off energy such as staff costs and a proportion of all fixed costs and the opportunity cost for firms in devoting time to monitoring the market and/or participation in DSR.

Therefore there is limited potential for further penetration of DSR in the large industrial and commercial sector.

Small and Medium Enterprises and Residential Sector

The major impediment to DSR in the small end user sector is retail price regulation, which precludes both the development of innovative pricing structures and a market based response to the implementation of interval meters where the expected benefits exceed the expected costs. Households need to be able to save money or receive a rebate from reducing demand to be incentivised to participate in DSR. Without price controls, the costs associated with moving to interval meters can be recouped from customers and retailers can use time-of-use pricing structures to encourage consumption patterns that respond to costs of supply. The frameworks used for regulation of retail prices are preventing retailers from charging cost reflective prices.

Government role in aggregation and removal of impediments to DSR

There is no need for government to facilitate aggregation. The reason that it has not already evolved is the contractual and settlement. Origin already successfully participates in DSR with large end users. However, we support the SCO proposal for further research work on capacity building for end users.

The main role for government in removing impediments should be to remove price caps which are limiting the value of demand side responses for small end users and hence their role is far smaller than it could be in the absence of price regulation.

An effective DSR for the residential and small business sectors may be in energy efficiency, where there could be a role for government to mandate building standards in order to reduce peak loads.

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Interval Meters

Origin again supports SCO's balanced view of the effectiveness of interval meters in rejecting the recommendation of the CoAG review for their mandated roll-out. However, in the context of national harmonisation, Origin believes that a co-ordinated approach to regulation be favoured above one which allows individual jurisdictions to come to differing conclusions on the best way forward.

Review of the effectiveness of interval metering for large end users

Origin does not support a review of effectiveness of interval metering for large end users. The conclusions of an effectiveness study are predictable in that for those large energy users who source their energy in a fully competitive and de-regulated market, and that can adjust their production processes rapidly, interval meters are useful for accurate and cost-reflective pricing of the load profile and, at times of high energy prices and price volatility, for measuring and rewarding demand side response.

Instead, a study of the costs and benefits of interval meters for small and medium enterprises and residential households would be more useful. The study should include a statistically significant trial of interval meters for small end users. This study would be most useful if undertaken in a deregulated retail market. Otherwise, the study will need to make assumptions about how prices would be structured in absence of regulated price controls. The information on consumption choices is most insightful when consumers can adjust demand to benefit from price fluctuations.

Customer class/market segments that could benefit from a rollout of interval metering technology

Similarly, there is little point in identifying which customer classes could benefit from interval metering when prices are capped because the customers can't derive the full savings from interval metering. In the absence of competitive price signals, the range of consumers benefiting from interval meters is likely to be much narrower than the range of customers that could benefit from a fully competitive, de-regulated retail market.

Any investigation into the benefits of interval metering for a particular class of consumers needs to address the costs as well. When considering the benefit of a roll-out, the costs to retailers need to be evaluated. Under price regulation, retailers could not pass through the retailer costs of interval metering to consumers. Costs faced by retailers include redesigning their businesses to focus on pricing issues, redesigning customer billing based on actual demand rather than profiled loads, installing and maintaining IT systems to manage the data, maintenance of meters, integration of IT technology between retailers to allow customer transfers, compatibility issues with different types of meters, customer education programmes, and increases in call centre queries. However, in a fully competitive market characterised by an absence of price regulation, interval meters will be installed as a result of market forces where there is an expected net benefit, in which case the retailer may bear the costs in anticipation of recouping those costs from the consumer.

Use of load profiling subject to further assessment of the development of cost reflective tariffs

Origin encourages the MCE to support deregulation of the retail energy markets. With unregulated prices, there is more scope for retailers to offer cost reflective pricing. Origin does not support mandatory roll-out of interval metering. Where interval meters are not installed there is no alternative to load profiling as a basis of settlement and pricing.

Retail Pricing

Principles and Methodologies of Price Regulation

The SCO's requests for industry views on this issue appear to be based upon the premise that government should continue price regulation as a transition to achieving effective competition. Origin believes that the retail market is already effectively competitive and price caps themselves prevent the market from becoming more competitive. Instead of focusing on how to manage price regulation the discussion paper should be focusing on how and when to remove price caps.

Price regulation stifles competition and hinders development of product innovation, including demand side responses and the introduction of interval metering where it is economically advantageous. Price regulation itself is a major impediment to user participation in demand as well as impeding the transition to a more competitive environment where energy prices are more cost reflective. Origin does not agree with the premise that the regulatory methodological framework could be altered to bring retail prices more closely aligned with energy costs. Competitive markets, operating without distortions, inevitably are better at performing this function than governments. Second guessing the market is not an effective role for government.

Origin contends that the removal of price caps is likely to result in more price competition between retailers by opening up a range of options more tailored to consumer's consumption patterns and more targeting to meeting customer's main interest around prices. It would also allow for a market-based, rather than regulated, response to interval metering, where customers who can anticipate a benefit will be incentivised to participate. Price regulation stifles price competition and limits the development of innovative products. Subsidies resulting from governments' pursuit of social equity issues should be funded outside the energy market through welfare payments and/or tax rebates.

Timeframe for periodic price cap review

Origin contends that the MCE reform process itself should consider upfront the need for price regulation, rather than considering a time frame over which it should be assessed. Origin is confident that a review will conclude that competition is becoming more effective but is hindered by retail price regulation.

The criteria needed to develop a framework for a price cap review.

The relevant definition for effective competition is as described by the Trade Practices Act, where a market is assumed to be competitive until there is a burden of proof to the contrary. The energy market should be treated equally in this regard with other markets and therefore have the same approach as in the Trade Practices Act used to assess competition.

If however, regulators want to pursue an assessment themselves of the effectiveness of competition, the assessment must be objective, namely a comparison of the energy market with other similar markets such as telephony, insurance or banking markets but with allowances made for the inflexibility of energy retailers to compete on price.

The comparison should focus on the magnitude of rivalrous behaviour in terms of:

- customers being aware that they have a choice;
- customers knowing how to exercise choice;
- the ease by which choices are made; and
- choices (offers) being made available to customers.

Using the criteria above would give sufficient information to assess if there is effective competition. Origin considers that on the basis of the above criteria, the retail market does

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indeed exemplify effective competition. Therefore there is no need to continue with retail price caps or consider a review of retail price caps.

Establishment of an electricity price comparison website

Origin is not convinced of the effectiveness of a price comparison website.

A website would rely on price as the source of comparison, to the exclusion of other benefits that may be provided. However, the market offers products that have non-tariff related benefits (driven by the continuing presence of price regulation), including rebates, loyalty schemes, specific products like Green Power and non-energy offers. These factors cannot easily be compared through a website format and may reduce diversity in products on offer.

The use of a comparison service entails using an estimated consumption pattern, based on assumed seasonal and, for controlled load customers, time of use variations that may differ from the consumers actual demand pattern. As a consequence, the customer may be misled into choosing a product under which they may actually be worse off.