



# Tasmanian Renewable Energy Alliance

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## Response from Tasmanian Renewable Energy Alliance for TasNetworks Tariff Reform Working Group

### Tariff Reform Principles

While we support the proposed tariff reform principles, we are concerned that they are not framed to actively encourage changes in customer behaviour that support the National Electricity Objective. Without change in customer usage patterns, tariff reform is a zero-sum game in which some customers will be better off but others will be worse off. We suggest an additional principle along the lines of:

“Tariffs should send price signals to customers that encourage changes in energy consumption patterns which make more efficient use of the network and reduce the long term cost to all customers.”

Falling PV panel costs and anticipated reductions in local storage costs are likely to result in it becoming economically viable for some customers to go off-grid. It should be a principle of tariff reform that customers are given a value proposition to remain on grid except in locations where the cost of providing access to the distribution network exceeds what can reasonably be charged to customers.

### Problems with Demand Time of Use

As we understand the current proposal, it is to introduce a new component for network charges in which customers are charged based on the maximum instantaneous demand in a billing cycle in each of three time bands (peak, shoulder and off-peak). While this may more accurately reflect the actual cost of network usage for individual customers it has significant problems:

- It is a totally new way of charging customers and it will be difficult for many residential customers to understand the logic behind it.
- Demand ToU charges would need to be passed through and identified as such by retailers to have any effect. Retailers in Tasmania are unlikely to develop retail offerings that pass through these charges unless similar changes are made in the larger mainland states due to the cost of making changes to billing software.
- Customers will not perceive these charges as predictable if they only find out about their maximum demand incidents when they receive their quarterly bill.

To have any chance of being useful ‘demand time of use’ charges will need to be implemented in a way which either:

- Sends a text message to customers when a maximum demand incident is imminent so that they can reduce demand, or (more realistically)

- is used in conjunction with in-home automation which automatically switches off non-critical loads to avoid exceeding maximum demand levels chosen by the customer.

Both these scenarios are for a minority of early adopter customers. As such we believe that 'demand time of use' tariffs should be an option rather than being implemented for all customers.

## **Problem with increased fixed charges**

The proposed transition pricing strategy for 2017-2019 is to increase fixed charges and reduce variable charges. While this may more closely match the actual cost of using the electricity network, it has several undesirable impacts:

- Reduced consumption charges will discourage investment in energy efficiency. Customer awareness and implementation of energy efficiency has been an important change over the last decade and should not be discouraged. While the resultant reduced demand (and the lack of anticipation of this by the regulatory system) has created challenges for the electricity industry, energy efficiency remains an important goal, particularly for Tasmanian households which have poorly performing housing stock.
- Reduced consumption charges will discourage investment in distributed generation including household and commercial PV.
- Forced changes to tariffs for existing PV owners will disadvantage customers who have made significant investment decisions based on existing c/kWh consumption charges.

## **Limitations of network tariffs as a mechanism for change**

Changes to network tariffs on their own will have a slow and limited impact on customer behaviour and hence on network costs because:

- Network tariffs are less than 60% of electricity costs.
- Network tariff changes only impact on customers if they are passed on by retailers with the same structure.
- It will take a number of years before tariff changes flow through to a significant number of customers due to implementation issues.

## **Role of distributed generation and storage**

The main form of distributed generation at the moment is domestic solar PV. However we expected that in the near future this will increasingly be supplemented by small hydro, on-farm wind, medium scale commercial solar, and bio-energy. Combined with decreasing costs of battery storage (and the inherent storage capacity of some hydro projects) and the uptake of electric vehicles, distributed generation and storage will be an important part of the electricity network of the future.

Current network tariff reforms seem to be based on the traditional model of customers as being only consumers of electricity rather than active participants in the operation of the network.

Tariff reform needs to support innovative solutions that allow distributed generation and storage to actively support the network. Distributed generation and storage has a number of economic benefits:

- it reduced network losses by generating electricity closer to the point of use

- it can defer or avoid the need for network augmentation
- increasingly it will have the capacity to export energy to the grid at the times it is most valuable.

At the moment it is difficult for distributed generation projects to access a fair share of this economic benefit. We recommend that TasNetworks investigate ways in which network tariffs could support distributed generation where it provides benefits to all users of the network.

## What is the way forward?

The objective of changes to the charging of network costs should be to:

- discourage growth in peak demand in locations where the grid is approaching constraints
- encourage a move in consumption from peak to non-peak times
- encourage new domestic loads such as electrical vehicle charging to occur at non-peak times
- encourage distributed generation, particularly where this can reduce peak loads and defer or avoid network upgrades
- provide incentives for customer to stay on the grid in locations in which the grid provides a cost effective service
- support customers in remote locations to install off-grid systems where this would avoid the need to extend or upgrade the distribution network.

TREA does not believe that the compulsory introduction of changed network tariffs for all customers is the best way to achieve this better network utilisation.

TREA is keen to work with TasNetworks to explore policy options that would achieve these objectives. Tariffs that include a 'demand time of use' component and which are available as an option for customers are an important part of providing incentives for the desirable changes, but network tariffs changes alone will have a very limited impact unless they are part of a more active series of initiatives.

Possible initiatives include:

- working with suppliers of electric vehicle charging technology to identify ways in which grid connected electric vehicles can export power at times of peak demand
- working with suppliers of PV inverter and home automation systems to identify ways in which household systems can move demand to non-peak times and export power at times of network constraint.

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