



Submission:

**2010 Annual Wholesale Energy  
Market Report  
November 2011**

by the  
Sustainable Energy Association of Australia  
[www.seaaus.com.au](http://www.seaaus.com.au)

## Executive Summary

The Economic Regulatory Authority (ERA) Report to the Minister on the Wholesale Electricity Market (WEM) covers many areas of the WEM that are relevant to members of the Sustainable Energy Association of Australia (SEA) who are involved in generation, distribution and retail of energy in WA.

In relation to the recommendations set forth in the Report, SEA is in overall agreement with many of the recommendations made in the Report regarding improving and reforming the WEM. However, not all recommendations made are completely agreed with by SEA as there are limitations which are addressed in this submission on the Report.

## Recommendation 1 – WEM Future Strategy

SEA supports the need for an overarching strategy for the future development of the Wholesale Electricity Market (WEM) in Western Australia (WA) as there is currently significant uncertainty for the potential issues regarding new entrants to the market and managing the market as it evolves.

SEA believes this plan should include:

- actions to transition to a price structure that is reflective of competitive market outcomes where sufficient revenue to cover costs and justify investment;
- a review and revamp of the Access and Queuing Policy;
- consideration of the value of capacity and the ability for some capacity to deliver outcomes and a more equitable structure for some types of generation capacity;
- expansion of the scope for retail contestability; and
- other matters also further discussed in this submission.

Overall the strategy for the WEM must align with that of the Strategic Energy Initiative (SEI), assuming that when released the SEI is supportive of future sustainable growth.

## Recommendation 2 - Development of an overriding economic efficiency directive

In creating an overriding directive for the consideration of economic efficiency, there is a single underlying assumption that efficiency is the single most important goal of a market. This assumption does not necessarily mean that an economically efficient market is the best choice when the market ignores important externalities and that are as a consequence become subordinate to economic efficiency.

Efficiency is an important goal of the economy, but it needs to be inclusive of sustainability, and desirability of goals and outcomes for the benefit of the community. For example decisions that are solely on the basis of simple economic models that then use economic efficiency as primary driver do not account for the cost of a range of externalities, and so these factors are not appropriately reflected in economic decisions. A sustainable society depends on much more than efficient allocation of goods and services, issues such as:

- the sustainability of resources,
- the efficiency of the use of resources in a manner that minimises the long term cost to society;
- the issue of social equity and fairness (minimization of the impact on the disadvantaged which can create an additional drain on resources).

Where an economically efficient system is able to account appropriately for these externalities then the overriding economic efficiency directive is right, however, without being able to account for the externalities, economic efficiency can produce a suboptimal result.. SEA supports economic efficiency For the SEA, we support the WEM aiming to achieve:

- productive efficiency (dispatching the most efficient plant first, all the time);
- allocative efficiency (setting the right price, without subsidies or distortions so that electricity consumers can make good decisions about whether to consume electricity or not); and
- dynamic efficiency (getting new investment right).

#### Recommendation 4 – Tariff equalisation

The Tariff Equalisation Fund payments borne by customers on the SWIS are an unfair burden and create a situation where electricity prices are not-reflective of the actual costs to the consumer. Fully cost reflective tariffs would have a component of cost related to the region where the electricity is consumed and the electricity generation source. This would lead to significantly increased energy costs for some consumers, particularly in rural and regional areas. However, while SEA supports cost reflective pricing, the Association recognises the political reality that this is unlikely to happen in the near future. As fully cost reflective tariffs based on actual costs to individual consumers is unlikely to occur, in that circumstance the TEF payments must to be sourced from somewhere to ensure all people in WA have an equitable access to energy.

The current TEF is supported by additional costs included in the network charges, for which SWIS users derive no benefit. SEA supports the proposition that the TEF should be removed and that payments in place of the TEF should be made as a community service obligation (CSO) from the general revenues of the Government.

SEA supports the changes to the TEF concept in as much as it notes the removal of the TEF will create a situation where “... *current electricity retail tariffs would be approximately cost reflective.*”

#### Recommendation 5 – Cost reflective tariffs and retail competition

SEA strongly supports the introduction of both cost reflective tariffs and an increase in the market competition for the retailing of energy and electricity. The current circumstances provide a dominant market position for residential retail, while the market is currently dominated by bilateral contracts. The current market structure leaves little room for the development of innovation within the market and the potential for mass-customisation of energy retail products, which are available elsewhere in Australia.

The current levels of supported prices in the electricity market have been noted by SEA’s research as one of the significant barriers to the potential uptake of more energy efficient plant and equipment and energy efficiency behaviour measures. With no effective price signalling of inefficient behaviour and a supported price, energy efficiency uptake has so far fallen short of what could be considered optimum.

SEA supports the development of a plan and timeline to move to a cost reflective pricing structure and greater retail competition in the market by the Office of Energy. However, broader stakeholder groups than just those noted in the Report to the Minister need to be consulted on the future plan and timing for these changes and that this should be one of the highest priorities for the IMO and the Government

#### Recommendation 6 - Capacity credits & intermittent generation

The Capacity Market on the WEM is unique in Australia and SEA notes that

1. The Capacity market is oversupplied, and inefficient in its current form,
2. There is a need to revisit the function and pricing of the Capacity Market with the objective of economic efficiency and the Market objectives;
3. In the event that the market continues to have capacity credits:
  - a. SEA support capacity credits being applied to intermittent generations' contribution to the system peak.
  - b. consider the need for longer term, stable contracts in order to enable projects to be financed, which is consistent with dynamic market efficiency.

In the recent proposed Rule Changes by the IMO for intermittent generators, SEA supported the proposal that a new intermittent Capacity Credit system is established whereby:

- capacity credits reflect the contribution to the peak load; and
- where the Uncertainty ('U Factor') is included in the methodology, then the U Factor should vary dependent on the type of intermittent generation.

Furthermore, SEA supports the inclusion of potential for the upcoming changes to intermittent renewable energy generation in the IMO's Statement of Opportunities document. However, there are significant risks to varying intermittent Capacity Credits on an annual basis, rather a review of the methodology should be valid for a number of years to minimise the impact of unusual annual variations in weather / climate conditions that can impact the capacity credits allocated. The issue is that the historical performance of intermittent renewable energy is not predictive of its future performance and thus to rely or vary formulas based solely on recent historical data only is an unsound principle.

While it is acceptable that intermittent renewable energy producers accept some risk in relation to varying capacity credits, the variation on a year on year basis is overly punitive to these generators and does not promote the reduction of greenhouse gas emissions, other than through the increased use of LNG, which is facing its own potential supply limitation in future and is subject to the potential for significant cost increases in the future.

### **Recommendation 7 – Demand Side Management**

SEA supports the validation of Demand Side Management (DSM) curtailment capability with the aim or reducing energy costs to consumers as capacity payments are part of the retail cost of energy. However, in considering the potential impact of proving the effectiveness of DSM, consideration has to be given to the impact on DSM providers and those clients of theirs that have the curtailable loads.

Should changes to the Capacity Credits mechanism for DSM be introduced, then the treatment of the allocated capacity should also be based on the certainty / reliability of the curtailable load, actually being curtailed, in a similar manner to the treatment of intermittent renewable energy supplies.

SEA cautions that significant changes to energy demand will be promulgated over the next decade through the deployment of smart devices on smart grid. SEA's view is that far greater demand side management will be achieved through technological innovation in appliances, particularly through the coming Zigbee standards that will see appliances interacting with transparent market signals to make decisions about powering up or down, than will be achieved by command and control decisions of a central utility. As a business chamber supporting market based strategies, SEA sees this as a preferred outcome. Therefore, design rules in future markets need to be flexible enough to accommodate the arrival of

### **Recommendation 8 – Constrained Access Market**

SEA supports the move to a constrained access market model for the WEM based on the reasoning provided in the ERA report as well as the submission provided to the SEI by Western Power. The potential benefits for a constrained access network are considerable for market participants, particularly for new generation entrants coming into the market.

In considering the shift to a constrained access market, SEA supports that a significant amount of work would be required to make this transition from and unconstrained to a constrained market as it changes the potential dynamics of how the WEM fundamentally operates including the necessity for a capacity versus a supply market and the implication of this on intermittent generation.

There are a number of factors in the potential transition that need to be addressed:

- How the constrained market will operate in respect of existing bilateral contracts and access to network infrastructure;
- How access might be allocated to generators;
- The pricing of access to the infrastructure and how this is paid for (generator contributions); and
- The tradability of access rights between market participants.

### Other issues – Renewable energy support

SEA is of course a strong supporter of the entry of all types of renewable energy into the market, including small-scale distributed energy systems. The report is critical of schemes that support the introduction of small-scale renewable energy generation. It is SEA's position that all forms of distributed sustainable energy should be able to sell excess electricity into the grid at fair and cost reflective prices that reflect the value of that energy. SEA would like to see a process where a rigorous assessment of the value of that export is undertaken, and that this is implemented as a matter of priority.

SEA contends that the Finding 1 in the Report to the Minister made a number of errors in its conclusions. SEA would argue the conclusions drawn by the ERA on claimed inefficiencies of renewable energy schemes and their adverse impact on consumers:

- were based on superseded data in that it referred to the analysis of schemes which had been closed for over a year (e.g. Solar Homes and Communities);
- did not differentiate between capital grants for purchase of Solar PV and revenue payments for exported energy, including clearly differentiating between gross and net-feed in tariffs;
- used comparisons to interstate cases that are largely irrelevant to the WEM, particularly given the ERA's own comment about the inconsistency of schemes in different jurisdictions;
- did not undertake any form of analysis to the WA FiT scheme and its objectives;
- failed to consider the rapid changes in renewable energy pricing in 2011; and
- did not consider the potential for ongoing price reductions in the deployment of renewable energy into the future.

In commenting on renewable energy schemes, the focus of the ERA report only covered a single aspect of the support for renewable energy – GHG emissions reduction in respect of the economic efficiency of reducing carbon emissions. SEA supports a price on carbon but recognises that there are significant other subsidies that distort the cost of energy. The ERA only talks about the economic efficiency of greenhouse gas abatement costs – the need for deployment of renewable energy in Western Australia and across the nation is not only about abatement.

SEA also believes there is a legitimate role for government to support specific industries, including renewables. While dealing with greenhouse gas emissions creating dangerous climate change is certainly the main game of developing low emissions economies, action on sustainable energy also delivers new jobs in the education, research, government, business and community sectors across the economy. Further, other important policy objectives achieved in supporting renewable energy and moving to a clean economy includes energy security, energy price certainty, energy management and community values that are created through complementary measures.

## About the Sustainable Energy Association of Australia (SEA)

### The peak body for sustainable energy

SEA promotes the development and adoption of sustainable energy technologies and services that minimise the use of energy through sustainable energy practices and maximise the use of energy from sustainable sources.

### SEA 2030 VISION

'On behalf of the people of Australia, the Association will vigorously promote the development and adoption of sustainable energy so that by the year 2030 more than 30% of Australia's energy use in and across all states and territories is displaced by sustainable energy practices so that energy demand is more than 30% below that measured in the year 2000, and that more than 30% of energy use is derived from sustainable sources.'

### About SEA

SEA is a chamber of businesses variously promoting, developing and/or adopting sustainable energy technologies and services that minimise the use of energy through sustainable energy practices and maximise the use of energy from sustainable sources.

SEA is building relationships with businesses that aspire to be more sustainable in their own energy use, are providing the commercial solution to climate change through their products and services, or indirectly through their actions adopting more sustainable energy practices in their own business. Many businesses are acting to support the development of the best policy outcomes for the industry by becoming SEA members.

The role of governments is to build frameworks of governance that establish clear market signals for change and growth, and allow Australia's innovative businesses to respond and deliver market-based solutions.

A key role of SEA is to offer policy options to governments building those frameworks.

SEA supports action on sustainable energy in every region and in all sectors of Australia's economy.

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