# BABCOCK & BROWN

Babcock & Brown Australia Pty Ltd  $\cdot$  ABN 49 002 348 521 Level 51 Rialto South Tower  $\cdot$  525 Collins Street  $\cdot$  Melbourne VIC 3000 Australia T +61 3 9627 2800  $\cdot$  F +61 3 9629 8040  $\cdot$  www.babcockbrown.com



Sydney

# **Confidential Submission**

19<sup>th</sup> February 2009

Dr. John Tamblyn Chairman Australian Energy Market Commission AEMC Submissions PO Box A2449 SYDNEY SOUTH NSW 1235 submissions@aemc.gov.au

Dear Dr. Tamblyn

RE: Submission on Interim Report of the Review of Energy Market Frameworks in the light of Climate Change Policies

Please find attached our submission with regards to the Interim Report: Review of Energy Market Frameworks in the Light of Climate Change Policies. This submission covers the issues in the Interim Report with particular emphasis on Issue A5 which covers the most important topics with regards to efficiently and expeditiously connecting new generation plant encouraged by the RET and CPRS schemes.

We look forward to your consideration of the issues raised in our submission. As mentioned in the submission, we would be pleased to have the opportunity to speak with representatives of the Review Committee. Please contact the undersigned (email: <a href="mailto:jonathan.upson@babcockbrown.com">jonathan.upson@babcockbrown.com</a>, phone: 03 9627 2872) if you wish to discuss these matters further.

I would appreciate that you treat this submission as confidential.

Yours Sincerely,

Jonathan Upson Babcock & Brown

Jonathan noton

Melbourne Brishane Auckland Vancouver San Francisco San Diego Dallas Houston Toronto New York Greenwich Dublin Madrid London Paris Luxembourg Milan Munich Rome Vienna Johannesburg Dubai Kuala Lumpur Singapore Hong Kong Perth Tokyo



# Submission to the AEMC Interim Report on the Review of Energy Market Frameworks in the Light of Climate Change Policies

\* Confidential \*

# 19th February 2009

# 1 Introduction

This submission has been prepared in response to the AEMC's Interim Report: Review of Energy Market Frameworks in the Light of Climate Change Policies. The review is timely and critical considering the magnitude of the changes to energy markets that will be experienced over the coming decade.

Babcock & Brown / Babcock & Brown Wind Partners have considerable experience developing, building and operating electricity generating power plants and is the largest owner of wind energy facilities in Australia. This experience provides valuable insights into the operation of electricity markets and the problems associated with delivering network services for renewable and low carbon electricity generation projects including those that are in 'fringe of the grid' locations.

There are a multitude of factors imposing enormous new challenges on electricity markets and the frameworks that manage these markets. Certainly two of these factors are the RET and CPRS schemes. However, there are other challenges such as the increasing demand for electricity at new, or expanding, mine sites oftentimes located in remote, and off-grid, areas. The continuing drought in southeast Australia is another factor which not only reduces hydroelectric generation, but also impacts on coal fired generators which utilise large quantities of water.

Some of the issues raised in the interim report are outside our field of interest and/or we agreed with the approach the AEMC was taking. Therefore, we purposely did not address all of the issues raised in the Interim Report.

# 2 Issues Raised in the Interim Report

Issue A3 - Investing to meet reliability standards with increased use of renewables

We agree with the AEMC that existing frameworks are capable in this respect and that this is not a material issue. Therefore, further investigation by the Review is not necessary.

# BABCOCK & BROWN

Issue A4 - System operation and intermittent generation

We agree with the AEMC that existing frameworks are capable in this respect and that this is not a material issue. Therefore, further investigation by the Review is not necessary.

Issue A5 - Connecting new generators to energy networks

#### **Question A5.1**

We agree with the Interim Paper that this is a significant issue and should be further progressed under this review. In fact, from a renewable energy generator's perspective, this is the most significant issue and should be a major focus as there are a number of important facets to this issue.

# Will the current energy market frameworks deliver?

We agree with the two areas identified as 'Likely to require amendments'; however, we would propose to expand the second bullet point as discussed below.

#### This is a material issue

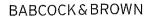
We agree with the points made in both the *Multiple connections in the same place at the same time* and *Connection assets and the risks of predetermining their optimal size* sections and would also add that one of the major barriers to generators sharing connections today is the risk of the 2<sup>nd</sup> or 3<sup>rd</sup> generator's project being delayed or not proceeding leaving the first mover either paying 100% of the connection cost of the "joint asset" or abandoning the project. Project delays due to planning approvals, financing, negotiating Power Purchase Agreements (PPAs) are very common, and there is no practical way today to manage this risk as the 2<sup>nd</sup> and 3<sup>rd</sup> generators will be unwilling to fund their share of the connection until their project reaches financial close.

Processing a high volume of connection applications

While we agree that the increased volume of connection applications and resultant technical, commercial, and legal work this entails is a material issue, it is not the most significant issue in our experience.

In broad terms, the key issue is that the current bilateral negotiation framework between generator and NSP can resemble more of a unilateral negotiation between the monopoly network service provider and the proposed generator. The rules are broad enough to enable NSPs to make unreasonable demands on the proposed generator, who has little option but to "take it, or leave it" since there is only one NSP a generator can negotiate with for a given project. While, in theory, there is potential redress to the responsible regulatory body, this process is agonisingly slow and has the real potential to create an adversarial process out of the connection negotiation further delaying conclusion of the connection agreement.

Confidential information has been omitted (here) in accordance with section 48 of the National Electricity Law.



Confidential information has been omitted (here) in accordance with section 48 of the National Electricity Law.

# What are the possible mitigation options?

Babcock & Brown congratulates the AEMC for proposing some options with regards to improving the efficiency of connection of generation plants fostered by the CPRS & RET located in remote regions. After a review of the options, we would strongly support changes consistent with Option 4. We believe the cluster, or hub and spoke, approach is an efficient and valid response to improving the current bilateral-only approach to network connection agreements.

With regards to the other options, we consider that Option 1 is too inflexible and rigid a system. In addition, it presupposes that serious connection studies and funding of connection agreement negotiations occur early in a potential generation project's development which does not occur for a number of valid reasons.

Options 2 and 3 suffer from the issue, identified earlier, of failing to adequately manage the risk to the first mover of the 2<sup>nd</sup>, 3<sup>rd</sup> (and further) generation projects sharing a hub being delayed or potentially not going forward at all. Using the 50% capacity criteria floated as an example, it would be very difficult for the 2<sup>nd</sup> generation project to commit to 25% of the cost of the hub until their project was essentially at financial close. The inevitable result is that the first mover would experience costly delays waiting for the 2<sup>nd</sup>, and potentially 3<sup>rd</sup>, project to be able to commit to millions of dollars to fund their share of the hub.

We look forward to the committee's second interim report expanding on how Option 4 might proceed in more detail.

# BABCOCK & BROWN

Issue A6 - Augmenting networks and managing congestion

While not as important as Issue A5, we agree with the AEMC that further examination of this issue to determine its materiality is justified. Some of the additional or complementary points we would add to are as follows.

Locational signals for new generation plant

#### Transmission loss factors

As once can easily see in a review of historical MLFs, particularly in South Australia, some wind farms have experienced very significant changes to their annually reviewed MLFs. As one example, Cathedral Rocks wind farm had their MLF decline from 1.07 to .847 in just one year (from 2004/05 to 2005/06)

Confidential information has been omitted (here) in accordance with section 48 of the National Electricity Law.

The AEMC is absolutely correct in

stating in the interim report that,

"If SLFs (MLFs) are volatile year-on-year, then the effect of the locational signal is diminished, because it is not clear what is being signalled."

TNSP planning arrangements and responsibilities

While it may be true that in theory, the current Regulatory Test appears sufficiently flexible to account for benefits from transmission projects that flow from the expanded RET and CPRS, we do not agree this happens in practice. The Regulatory Test is a very slow and cumbersome process, particularly including the mandated consultative process, and is unlikely to respond fast enough to the rapid rise in generator connections enabled by the CPRS and RET. Footnote 104 states that Grid Australia and VENcorp were not sure whether the Regulatory Test captured environmental benefits. We are very confident in stating, it does not. We urge the Review to continue to pursue the point made on page 47 that clarifying the treatment of climate change policies in the Regulatory Test would be of benefit.

# TNSP operations

We would like to state that we concur with the interim paper when it states at the top of page 49, that current regulatory arrangements do not provide TNSPs with broader incentives to maximise line ratings or available network capacity.

Confidential information has been omitted (here) in accordance with section 48 of the National Electricity Law.

We would urge

the Review to continue examining this issue.