ERM Power Ltd

Submission to the Economic Regulation Authority on the Discussion Paper:

Annual Wholesale Electricity Market Report to the Minister for Energy

November 2011

1 Introduction

This document has been prepared in response to the Economic Regulation Authority (ERA) Discussion Paper: Annual Wholesale Electricity Market Report to the Minister for Energy 25 October 2011.

2 ERM Power Ltd

ERM Power Ltd is an active participant in Western Australia's Wholesale Electricity Market (WEM) as well as in the National Electricity Market (NEM). In WA, ERM activities include:

- operator of NewGen Kwinana 320MW combined cycle gas turbine power station;
- part owner and operator of NewGen Neerabup 330MW open cycle gas turbine power station; and
- electricity retailer to commercial and industrial customers through ERM Sales.

ERM has a substantial presence in both the WEM and NEM, and therefore has experience with the daily operation of both markets. ERM frequently provides retail products to customers with operations in multiples states and our experience of market mechanisms and outcomes is regular and clear.

3 Key Wholesale Electricity Market matters

3.1 Possible re-merger of Verve Energy and Synergy

What is the likely impact of a possible re-merger of Verve Energy and Synergy on the Wholesale Electricity Market?

It would be the sign of a maturing market to have real discussion on ways in which the Government could proceed to further dis-engage itself from being an active market participant. Unfortunately the opposite is true and consideration must be given to the spectre of a re-merger of Verve Energy and Synergy.

There is nothing to suggest that the Authority should reconsider its conclusion that a re-merger of Verve Energy and Synergy would undermine competition and impose costs and risks on customers.

The re-merger of Verve and Synergy would lead to a range of significant negative consequences including:

- decrease in incentive for private investment in the WEM due to the overwhelming size of the Govt participant;
- increase in regulatory risk from Govt reneging on market reforms would discourage investors and lead to an increase in funding costs for any new entrant;
- money spent on market reform to date would be lost investment;
- with reduced or no significant private investment, the WA taxpayer would bear the cost of building new electricity infrastructure at the expense of other Govt initiatives which could be pursued.

A re-merger of Verve and Synergy will not reduce upward pressure on electricity prices. Prices are rising as they approach cost-reflective levels after many years of having tariffs set at below-cost levels. The 2009 Verve Energy Review demonstrated how setting tariffs below costs does not make costs disappear and how the State taxpayers had to eventually pay for the $454 million losses incurred between 2006 and 2009.

The ERA discussion paper states comments have been made that privately-owned generators in the market are being subsidised and that this is occurring while Verve Energy's generators are not operating. Any suggestion that the Reserve Capacity Mechanism is being used to subsidise privately-owned generators from operating at the expense of Verve Energy's generators not being used is mis-guided at best. Verve Energy receives capacity payments for their plant along with other registered participants (see Figure 1 of the ERA Discussion Paper). Verve Energy's operational profile is the responsibility of its management and other market generators should not be held responsible for their performance.

3.2 Impact of climate change policies

Does the design of the Wholesale Electricity Market provide the most efficient outcomes with meeting climate change policies?

The fundamental purpose of electricity markets is to provide reliable power safely and efficiently. This is done through creating a clear price signal that reflects that value of electricity at a point in time. The WEM participants have recognised that the current Market Rules are inefficient and the Market Evolution Plan is taking clear steps toward improving the static efficiency of the electricity market. Ensuring that the electricity market continues to evolve to a close to real time market, where participants can react in real time to market events without bias toward particular technologies, will create the most efficient means of participants to effectively price in the impact of any climate related policy.

Policies that purposefully seek to influence commercial incentives for investment in favour of, or away from, particular forms of energy or energy technologies will create long-term difficulties. Climate change policies should be consistent with the efficiency, reliability and security objectives of the WEM. That is, they should not increase the system-wide costs of electricity supply and should deliver emission abatement objectives at least cost. They should deliver material security and reliability benefits for aggregate level of generation and for meeting maximum demand periods.

ERM agrees that the current renewable energy incentive schemes are an expensive and economically inefficient means to achieve the policy objective of greenhouse gas abatement. ERM also has concerns about the efficacy of the Clean Energy Future legislative package, particularly when viewed in conjunction with the existing Renewable Energy Act and associated regulations.

3.3 Impact of Demand Side Management capacity

What impact does Demand Side Management have on the achievement of the efficiency, reliability and security objectives of the Wholesale Electricity Market?

Demand Side Management (DSM) is a valid and useful market response for meeting demand changes without building additional generation capacity. An active 'demand side' response to price signals and/or market events is a key feature of an efficient electricity market.

However DSM is <u>not</u> additional generation and has some important differences and market implications.

The current Wholesale Market Rules have a clear bias toward incentivising DSM ahead of other forms of 'capacity' by providing for allocation of capacity credits to DSM but allowing for a much less onerous set of accompanying obligations associated with the provision of that 'capacity'. For example the contribution to peak demand period supply cannot be assured and the availability requirements for DSM are currently set at very low levels compared to other sources. Further, the "deemed peak" methodology can create a disconnect between the deemed peak and the DSM participant's actual usage immediately before a DSM event resulting in no certainty that the required load shedding occurs in practice.

DSM does not have the same capital cost intensity nor does it have the firm emergency capability of physical assets. As noted by System Management, it is clear that over-incentivising DSM will result in a reduction in the reliability of the Wholesale Electricity Market.

Customers in the NEM can be incentivised to participate in DSM programs by being offered reductions in critical peak pricing. DSM is therefore integrated into the NEM without the impost of system-wide costs, such has the WEM's capacity mechanism.

3.4 The effectiveness of the current outage planning Process and practices by System Management

What impact does the outage planning process have on the achievement of the efficiency, reliability and security objectives of the Wholesale Electricity Market?

The current process allows System Management to approve scheduled outages when they deem an outage is not likely to have a negative impact on system security. This is a necessity in the current market design as the current Capacity Credit Refund mechanism has no 'real time' relation to the scarcity of capacity in the market.

Currently Generators are compelled to pay significant payments to the market even during periods when there is no reserve shortfall, and seeking System Management approval for an outage during periods of high reserve is the only mechanism to avoid a penalty that is both punitive and inefficient in these circumstances. The current mechanism should only be reviewed in conjunction with a review of the Capacity Credit Refund mechanism.

It is noted that the Discussion Paper makes reference to higher STEM and balancing prices during outages as if these were an unexpected or incorrect outcome. It would be an unusual outcome for an energy market not to respond to a reduction in supply with a higher price, and any review of this issue should focus on whether or not System Management decisions impacted on the security of the system rather than transient price variations.

Of concern to ERM is the ongoing uncertainly associated with the ability for generators to move from one outage state to another. Currently the IMO seeks to interpret the Rules such that, irrespective of the availability of supply in the system, a generator should not be granted a Planned Outage unless currently available. It make little sense to implement a punitive penalty mechanism when the System Manager is satisfied that an outage will not impact on system security. The original Market Rules based planned outage approval on system security and not the current state of the facility. The current application of the planned outage approval process forces Market Generators to perform poor quality equipment repairs to avoid punitive market penalties. This drives a poor maintenance behavior and could ultimately lead to lower system reliability.

3.5 Effectiveness of the Rule Change process

How effective is the Rule Change process, and its governance structure, in promoting the efficiency, reliability and security objectives of the Wholesale Electricity Market?

As noted in earlier submissions by market participants it is timely that the IMO's dual role be reviewed with an aim to separate the rule change process from that of the Market Operator. The current governance structure is not consistent with a modern and robust market design, and has implications for the ongoing investment of private entities in the market.

3.6 The market of Bilateral Contracts and their influences on market outcomes

Does the recent increase in capacity traded through the Independent Market Operator have implications for the effectiveness of the Wholesale Electricity Market? In particular, does the recent increase in capacity traded through the Independent Market Operator imply that the level of the Reserve Capacity Price is too high?

The recent increase in traded capacity does not indicate the price is too high.

The objective of the Reserve Capacity Mechanism (RCM) is to ensure sufficient generation capacity exists to meet peak demand of the South West Interconnected System (SWIS). The cost of developing a new 160 MW open cycle gas turbine peaking power station is the basis for setting the Maximum Reserve Capacity Price (MRCP). A number of components including land, transmission system connection, fuel storage and handling, fixed O&M comprise the final cost compilation. The least cost location is then used to determine the MRCP. The Reserve Capacity Price (RCP) is based on 85% of the MRCP and adjusted downwards in proportion to excess reserve capacity. This mechanism ensures that regardless of the magnitude of capacity traded through the Independent Market Operator, the total price paid by the market does not exceed a level set by an independent expert.

The Lantau Group completed a review of the Reserve Capacity Mechanism in September 2011 and noted that whilst a capacity surplus currently exists, a shortfall in capacity previously existed and that a capacity shortfall would be a far greater cost than a capacity surplus.

The Lantau Group also noted that a significant increase has been seen in Capacity Credits provided by Demand Side Management (DSM) and that the availability requirements for DSM is set at very low levels compared to other sources.

The current mechanism ensures that those participants seeking to benefit from the Reserve Capacity Price (ie willing to take price risk) bear the risk and rewards of this decision, rather than the market. As the market price (the Reserve Capacity Price) is decreasing due to the oversupply, there is anecdotal evidence that those participants who were previously willing to take the risk on the Reserve Capacity Price remaining high will now have a clear incentive to trade bilaterally. While the bias towards DSM needs to be removed, the decrease in 'capacity market' price will result in a reduction in the amount traded through the IMO, and the amount of oversupply.

As mentioned previously the RCM was originally set to be less than the cost of building least-cost generation in the WEM such that a bilateral arrangement with an off-taker was needed for a developer to obtain finance for their project. That is, the capacity price was not designed to be enough to sustain investment on its own. However demand side management (DSM) projects have been certified for capacity and do not have costs associated with building capital intensive plant and supporting infrastructure and therefore can, in many instances, likely proceed even with a much lower capacity price. Therefore, reducing capacity price won't necessarily reduce the number of new DSM projects in the WEM. Rather, other approaches should be looked at including limitations on DSM totals or proportions of capacity in the WEM and/or limits on the quantity of DSM awarded on a year by year basis and only if the market would otherwise be short.

Rather than be part of the capacity mechanism, DSM can be treated by a separate supply mechanism in the market, as is done in the NEM, with a financial structure better reflective of the particular role it can play.

As a general concept, based on the current available technology, using the cost of an open cycle gas turbine to define the Maximum Reserve Capacity Price remains a reasonable approach.

Do the Existing arrangements regarding Bilateral Contracts provide sufficient transparency to achieve efficient market outcomes?

The existing arrangements for transparency are sufficient. The balance is being achieved between ensuring an efficient market whilst maintaining confidentiality. Increased transparency would unnecessarily risk confidentiality breaches and therefore market participant confidence.

3.7 Other Issues

Are there any other strategic, policy or high-level issues, including those raised in this Discussion Paper, that are impacting on the effectiveness of the Wholesale Electricity Market in meeting the Wholesale Market Objectives?

ERM considers the following actions to be beneficial in meeting the WEM objectives:

- The initial review of the Reserve Capacity Mechanism by Lantau has been a good starting point and the market would benefit from a thorough review of this complex mechanism. For example, in the WEM most small customers can only receive a firm price offer for a maximum of two years, the period for which the capacity price is known. In the NEM, similar size contracts are frequently priced for five years or more, which provides greater price certainty and security for small businesses and retailers.
- The market would benefit from a timetable and program for transition to a real time market and consideration given to removing the need for the STEM.
- Improvements could be made by the implementation of cost-reflective tariffs under a firm timetable which includes the removal of all business. This could be facilitated by using CSO savings in the first 12 months, to assist eligible small businesses install the interval meters needed to leave the current tariffs.
- The market would be improved by moving to full retail contestability in the next 12 months.

Are the Independent Market Operator, System Management and the Economic Regulation Authority effective in performing their roles?

The IMO is responsible for enacting or changing Market Rules, for operating the WEM and for enforcing the Market Rules. In the National Electricity Market, these three roles are performed by separate entities: the Australian Energy Market Commission (AEMC), the Australian Energy Market Operator (AEMO) and the Australian Energy Regulator (AER) respectively. The IMO's multiple roles in the WEM provide significant potential for conflicts of interest in administration of these combined functions. Whilst the much smaller size of the WEM compared to the NEM may seem to argue against the establishment of three separate organisations, the clear separation of these responsibilities into separate entities is essential for good governance and confidence in the WEM by all stakeholders including investors, operators and regulators. The impost for establishing and maintaining separate administrative entities for the WEM needs to be considered against the risks of not achieving proper governance in a market where over $1 billion of electricity is sold every year and where rule changes can drastically effect the commercial viability of capital rich investments that typically have 30+ year life-spans.