



23 February 2010

Australian Electricity Market Commission  
PO Box A2449  
SYDNEY SOUTH NSW 1235

Dear Sir/Madam,

ERM Power Pty Ltd (ERM) welcomes the opportunity to comment on the Reliability Standard and Settings Draft Report - "Draft Report" and accompanying consulting report by ROAM Consulting, released by the AEMC Reliability Panel (Panel) on 23 December 2009.

The Draft Report explores the reliability standard and settings needed to achieve the reliability standard of 0.002% at 1 July 2012, including the consultant's recommendations that the settings for the reliability standard of 0.002% need to be set at the following levels:

- Market Price Cap (MPC) \$16,000 per MWh
- Cumulative Price Threshold (CPT) \$240,000

***ERM does not support the rationale for any increase to the MPC or CPT.***

From ERM's experience in developing new peaking power plants over the last 15 years, and from our 30 years' experience as leading energy analysts and advisers, we consider that there is no case, nor precedent, for increasing the MPC levels in the NEM. Increasing the MPC, and the CPT accordingly, will from our experience in no way attract any additional electricity generation investment in the NEM, and accordingly will not improve the reliability standard. It will however add to the market risk for all participants in the NEM, and this will add significantly to the risk mitigation costs for all participants in the NEM. Increasing the MCP would be a disincentive to investment in new peaking plant for ERM, for its partners, and for its financiers, with clearly negative effect on the reliability in the NEM.

We make this submission as not only the major new power generation developer across the country over the last five years, by many-fold, but on the basis that all 2,500MW of new power generation for which ERM has been the lead developer has been gas-fired generation, and this has comprised 1,840MW of new open-cycle GT-generators in the NEM, 330MW of new open-cycle GT-generators in the WEM, and 320MW of combined-cycle GT-generators also in the WEM.

New peaking power generation investment relies predominately on financial off take contract arrangements, or on capacity payments under power purchase agreements, rather than spot market prices in the NEM. The contract market for financial off-take products and for PPA capacity charges for peaking plants is influenced by any net positive returns obtainable in an electricity market where economical gas supply prices are available, and this has been influenced by greenhouse abatement certificates to a small extent, and by gas-fired financial gas energy certificates in Queensland, which have had the effect of subsidizing the price of gas for the peaking generation. In Queensland, due the effect of the 13%/18% Gas Energy Certificate Scheme, open-cycle GT power plants have operated as intermediate generators, relying on NEM pool prices at between 15% and 45% annual capacity factors, in addition to financial products mitigating the price volatility risk of retailers.

In our experience, in financing these 2,500MW of mainly peaking plant, at an investment cost of more than \$2billion, the increase in the MPC to \$12,500/MWh would only have increased the net costs that a peaking power development would have to recover, due to a net cost of insurance to mitigate the increased exposure in

the event of generator unavailability. Any further increase in MCP would exacerbate the market risks that peaking electricity generators will face, and further disincentivise new generation investment..

For these reasons ERM does not support the rationale for any increase to the MPC, or in the CPT.

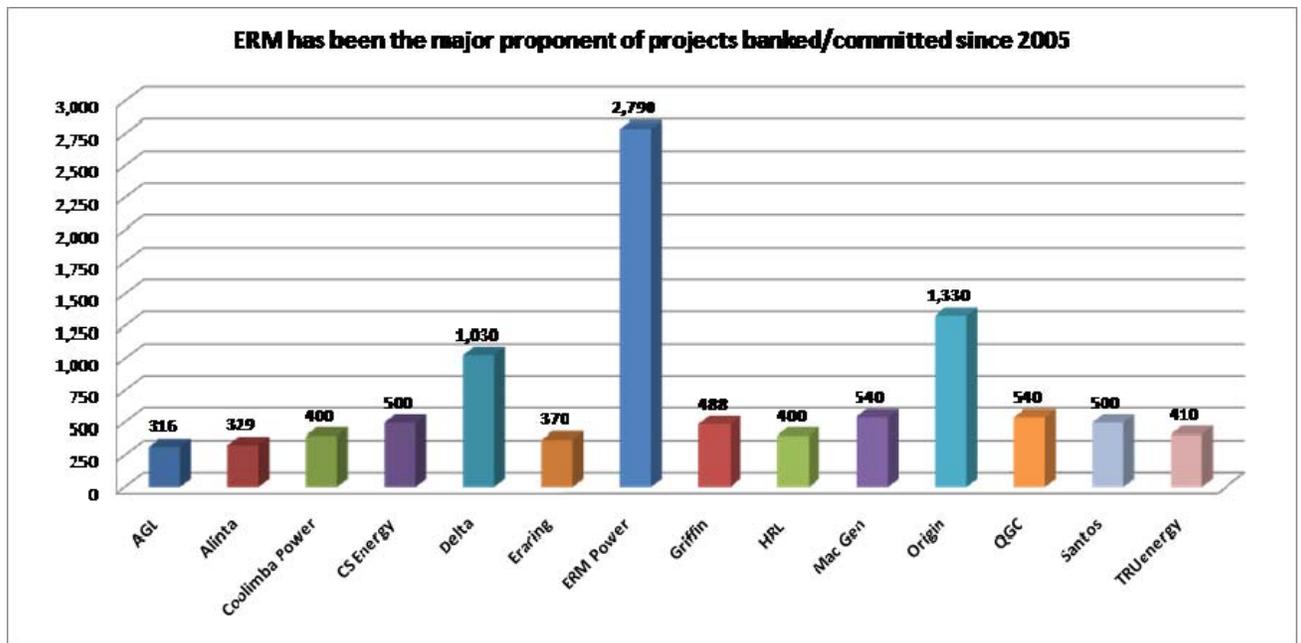
**ERM Power Pty Ltd**

ERM is the largest, privately owned energy company in Australia, and one of the only exclusively gas-fired and renewable generation developers. ERM has grown into an integrated energy company with modest but high-performing businesses in:

- Gas exploration
- Gas Procurement and Transportation.
- Energy Planning & Business Development.
- Power Generation Development and Operation – managing the operation and maintenance of a total of 1,100MW of power generation, in three different locations across the breadth of Australia.
- Retained joint controlling investment interests in a total of 1,400MW of gas-fired power stations in four locations across the country.
- Electricity retail – with more than 250 active customers (with 700 accounts), and approaching \$1billion in contracted revenue

ERM's corporate office is located in Brisbane, with regional offices in Sydney and Perth, and ERM employs more than 120 people across Australia, and is 100% owned by its directors and staff.

ERM currently has equity in operating power plants in Oakey (Qld), Braemar 2 (Qld), Kwinana (WA) and Neerabup (WA). ERM also has development approvals in place for major new gas-fired power plants in Braemar 3 (Qld) and Wellington (NSW), and is actively engaged in renewable power generation development planning.



In this submission, we outline the reasons why we do not support the reliability settings proposed in the Draft Report. Many of these reasons are shared by other electricity generators and are included in the NGF submission, in which we have not been able to make a contribution as a result of other work pressures on our personnel. We have set out our comments under similar headings as set out in the NGF submission by members who oppose any increase in the MPC.

We trust that our comments may be of assistance to the Panel in its deliberations.

### **Why the MPC should not be increased**

#### **1. Investment currently occurring at an MPC of \$10,000 per MWh and \$12,500 per MWh**

Since the inception of the NEM, and in particular over the last five years, there has been adequate investment in peaking plant in the NEM, notwithstanding the brief occurrences of load shedding in Victoria, which in any event did not breach the reliability standard of 0.002%. Looking forwards, when both committed investment and investment intentions are considered, as is reported in the ESOO, the reliability standard is shown to be expected to be met to beyond 2018-19, without a higher MPC as a further incentive to investment in peaking plant.

#### **2. The level of MPC does not drive investment**

ERM has added more than 2,000MW of electricity generation into the Australian electricity grid – and led the development of more than 40% of all new generation into the Australian grid with 6 plants over the last 5 years. Investment in electricity generation is not driven by MPC. It can be driven by a number of factors, including but not limited to: forecast demand growth, forecast contract prices, cost and availability of project finance, etc. The MPC is not the prime driver for investment by either existing participants or new merchant investors. Investment decisions require a degree of revenue certainty, which spot revenues do not deliver. The net effect of increased MPC on unavailability insurance premiums is more significant in peaking plant investment considerations than any impact of an increased MPC on financial products typically sought by electricity retailers from peaking generators, and would have no impact at all on the financing of a merchant peak generator, contrary to the analysis by ROAM.

Given that the ROAM Report bases its recommended MPC increase solely on spot revenue, and on the basis of modeling alone, we question the validity of its conclusions and recommendations.

### **Additional market risks associated with increasing the MPC**

#### **1. Transmission congestion risk**

Market risk from transmission congestion is a significant material issue in the current market framework, and an increase in the MPC will just increase this risk.

Increasingly there are periods when ERM, and most generators are in the same boat, when constrained off due to transmission failures, due to transmission congestion, or as is occurring more recently, when constrained off by non-scheduled generation, that risks of market exposure cannot be effectively mitigated against. There are in fact real concerns about the increasing incidences of such increased exposures due to potentially increasing level of congestion of all such forms in the NEM.

The NGF submission set out some of these transmission congestion and related risks, including due to unplanned outages of transmission links, the difficulty of achieving timely transmission investment under the terms of the transmission Regulatory Test, and the counter-impact of the market risk exposure of generators to the incentives for TNSPs to achieve their reliability targets. In addition however, we would add the following:

- In all regions, the exposure of fossil-fuel-fired generators, including peaking gas-fired generators, to being constrained off by non-scheduled generators, and potentially increasingly by renewable generators which have a much lower SRMC and other (“green”) sources of dispatch revenue, also mean that an increase in MCP only further exacerbates the exposure of fossil-fired generators in these circumstances.

ERM’s experience supports the submission by generators in the NGF submission that transmission congestion risks exponentially increase value at risk during MPC events, and that with a higher MCP, these combined risks could potentially increase the systematic or basis risk within the NEM. Any increase in basis risk flows through to an increase in expected rates of return on invested capital.

Accordingly, a higher MCP as proposed in the Draft Report, should not be implemented.

## **2. Generation risk – physical generation failures**

The market risk of physical plant failures has dictated generator contracting philosophies and risk mitigation provisions in the NEM, and because of the uniquely high MCP for the NEM from its inception, risk mitigation costs have represented a major material cost of wholesale electricity supply in the NEM, whether by way of contracting only “N-1” units of their installed capacity, or by way of insurance or other financial risk mitigation products. In our experience in the NEM, and in the WEM, there can be no doubt that increasing the MCP has a much greater impact on generation costs for all participants than the likely increased contract or merchant revenues likely to result from the increased MCP.

In the WEM, with an MCP at a fraction of the original \$10.000/MWh NEM MCP, the market risk from physical generator failures, as for any possible incidence of unpredictable constraining off of a generator, is able to be mitigated at a fraction of the cost of such risk mitigation in the NEM.

Whereas argument can arise as to the relative level of hurt that such material costs would have to base-load generators of different levels of traditional availability, and therefore to the relative competitive advantage to some base-load generators of even higher financial disadvantage to competitor generators with poorer available records, there is no such differentiation in the case of stand-alone peaking generators which, because of their necessarily higher SRMC’s, cannot rely on merchant revenues for their financial returns, and therefore increased costs of market risk mitigation for unavailability or from an inability to dispatch available plant can only be a disincentive to peaking plant investment, and therefore more likely to impair the reliability of generator supply.

ERM is accordingly in total agreement with the NGF generators opposed to a higher MCP in their comment, as follows:

*“A generator’s exposure to this (physical generator failure or constrained off dispatch) risk increases under a higher MPC (e.g. the plant failure occurs, price reaches the MPC and the generator must purchase energy from the spot). To manage this risk, generators may have to reduce their contract cover. This in turn increases their exposure to the spot market, potentially increasing the incentives and payoffs from strategic bidding. A higher incidence of strategic bidding may also lead to greater price volatility, which can increase the basis risks in the NEM.”*

## **3. Credit worthiness of the NEM**

The obvious impact of a higher MCP on prudential requirements needed by market participants, and especially on smaller businesses and on new entrant participants, should be reason enough to oppose not only the proposal to increase the MCP, but to also argue the case that there is no good reason for the MCP to be at the uniquely high level it was set for the NEM at its inception, and against its increase to \$12,500/MWh.

Retailers and exposed market customers would face increased costs associated with their prudential obligations in the NEM. All things remaining the same, such additional financial costs could increase the probability of retailer (or customer) failure. If a market customer default resulted in non-payment to AEMO, this could adversely



affect the credit worthiness of the NEM. Maintaining the credit worthiness of the NEM is imperative to ensuring the financial viability of existing and new generation businesses.

#### **4. Market competition**

ERM is in agreement with other generators opposed to a higher MCP because of its effect on market competition. We agree that the increased risks in the market, for both contracted generators and retailers, is likely to affect disproportionately merchant plant investors and smaller independent retailers who are will be less able to secure financing and manage high prudential costs. An excessive MPC may therefore reduce market competition with higher costs passed through to consumers.

#### **Conclusion**

ERM supports the recommendations on maintaining the existing reliability standard and its definition. ERM does not support the basis for any increase to the MPC or CPT. ERM appreciates the opportunity to make a submission on this issue.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Trevor St. Baker', is written over a light blue horizontal line.

**Trevor St. Baker**  
Chairman  
ERM Power Pty Ltd