

5 April 2004

Gari Bickers  
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Electricity Commission  
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Dear Gari

### **RESERVE ENERGY REQUIREMENTS FOR 2005**

Following the recent power shortages and early depletion of the Maui gas field, WEL is very concerned about the requirement for future reserve generation. Although we believe that the analysis undertaken on behalf of the Electricity Commission is an important component, we would like to highlight the following concerns.

#### *1. Reduced Focus on Current Generation Investment*

This focus on reserve generation should not be at the detriment of current generation projects. If this new focus results in the shifting of resources and investment to reserve generation then it may be at the determinant of a long term solution. Consequently, this may impact the on efficiency of the electricity market which could result in higher prices over the longer term.

#### *2. Lifting the Thermal Generation Cap*

The Electricity Commission needs to increase the competition in the wholesale electricity market by broadening the investment base for generation. This is possible by lifting the thermal generation cap on line companies and the retail market restrictions.

Existing line companies are well placed to invest in the wholesale electricity market, given their knowledge of the industry and access to funding. However, these investments will only occur provided that line companies can compete on even basis with the existing integrated generation and retail companies.

#### *3. Lead Times for Reserve Generation*

As is apparent from Project Aqua not only are the lead times for generation considerable but the greater the reserve generation the longer the lead time required. Identification of an opportunity, internal approval, construction and finally commissioning is likely to be a three to five year timeframe depending on RMA issues. Consequently, planning for reserve generation may require a longer term vision.

#### 4. *Modelling Methodology*

WEL is concerned that the methodology behind the modelling maybe based on scenario analysis originally designed for dispatch planning under an 'ECNZ' dominated central planning system and then later adapted to a theoretical perfect market. If this is the case then care needs to be taken when applying such a model to the current electricity market, where the company drivers may differ to that of both a centrally planned dispatch system and a perfect market. Of particular importance are issues such as the impact of future gas prices, generator gaming and the accuracy of plant availability.

#### 5. *Utilisation of Old Inflow Sequences*

WEL is concerned about the fundamental reliance on weather patterns that are now up to 71 years old to determine security standard. Given the continued reports of global warming can historical weather patterns be relied on? If the weather patterns have changed then the assumption that the Ministry is designing for a 1 in 60 year security of supply standard is no longer true.

WEL would recommend an investigation into different modelling methodologies. An example of this would be to run the modelling based on statistical patterns, these could be determined by increased weighting to more recent weather patterns.

I hope that you can cover the issues that we have highlighted.

Yours sincerely

Andrew Toop  
**COMMERCIAL MANAGER**