

IN THE MATTER of the Resource Management Act
1991

AND

IN THE MATTER of applications to the **WAIKATO
DISTRICT COUNCIL** and
WAIKATO REGIONAL COUNCIL
by **WEL NETWORKS LTD** for
resource consents to authorise the
establishment, operation and
maintenance of 28 wind turbines for
the generation of electricity and
associated activities on the
Wharaurua Plateau near Te Uku

FURTHER STATEMENT OF EVIDENCE OF PAUL CALLOW

1. INTRODUCTION

Qualifications and experience

- 1.1 My name is Paul Callow. I am a partner in the Corporate Finance practice of Deloitte in Wellington. My qualifications and experience were set out in my original statement of evidence. That statement also confirmed my agreement to comply with the Expert Witness Code of Conduct.

Purpose and scope of evidence

- 1.2 Mr Gallagher submitted evidence with the Waikato District Council on 13 February 2008 which raised specific issues in relation to the economic modelling of the project, Deloitte's review of that model and my evidence. The purpose of this statement of evidence is to respond to and correct his assertions in relation to:
- (a) What constitutes valuation best practice (section 2);
 - (b) The basis for establishing a hurdle rate or required rate of return (section 3);
 - (c) Terminal value assumptions (section 4);
 - (d) How best practice financial analysis deals with uncertainty and risk, in particular the fact that input assumptions will vary over time (section 5); and

- (e) The completeness of the input cost assumptions used in our analysis (section 6).

2. VALUATION BEST PRACTICE

- 2.1 In his evidence (paragraph 2.1) Mr Gallagher incorrectly attributes the statement:

*“Paul Callow states that **net present value** is the best practice method for assessing investments.”*

- 2.2 My evidence makes no such statement. It states that **discounted cash flow (DCF)** analysis is the valuation methodology used by finance professionals, corporate and private investors globally. Net present value is simply an output from this analysis which provides an indication as to whether a project is financially viable. I stand by this statement and would further add that DCF is the industry standard method I have seen used for the valuation and pricing of electricity generation assets for reporting and acquisition purposes, both in New Zealand and internationally.

- 2.3 The scenario planning to which Mr Gallagher refers can also be employed to assist investment decisions. It can assist in determining the possible ranges within which the various inputs, referred to in Section 5 of my previous statement of evidence, may lie. Scenario planning, or sensitivity analysis as it is more often referred to, is an input to DCF analysis not a replacement for it as Mr Gallagher incorrectly implies.

- 2.4 Net present value is an output value from DCF analysis. It provides a single value which can be used as a basis for investment decision making. Sensitivity analysis establishes the likely range within which this value sits and provides the investor with a measure of the risk and uncertainty associated with the investment.

3. REQUIRED RATE OF RETURN

- 3.1 Mr Gallagher's comparison (at paragraph 3.1) of Kiwibank deposit rates to WEL's hurdle rate or required rate of return is simply not valid. Making this comparison shows a lack of understanding of what the hurdle rate actually means. The Kiwibank 5 year deposit rate is currently 7.8%, only three quarters of that currently offered by the project, and is at a high point in the interest rate cycle, meaning it is likely to fall in the future. The WEL project hurdle rate of 10.1% is essentially the average rate of return required from the wind farm project over its expected 40 year life. The only valid comparison would be with a Kiwibank 40 year fixed rate deposit. No such rate exists, for very good reasons, and it would likely be substantially lower than 10.1% if it were offered.

4. **TERMINAL VALUE**

4.1 As stated in my previous evidence, a terminal value has not been included in our financial analysis. It is perfectly normal, and in this case relatively conservative, to value an asset over a fixed life without a terminal value, where the asset's expected life is reasonably well understood. Mr Gallagher, however, seems to infer two things from this:

- (a) That, as there is no abandonment cost, WEL will ignore its contractual commitments to restore the site and leave the turbines to their fate at the end of the 40 year period.
- (b) That the economic model has not factored in the cost of decommissioning and restoration of the site.

4.2 Neither of these is correct. The analysis assumes that the residual salvage value of the wind farm will offset the dismantling costs and there will be no net cost or gain at the end of the asset's life. Given the difficulty of predicting scrap or salvage values and the offsetting of dismantling costs in 40 years time, this is a reasonable assumption to make for the purposes of assessing the project's financial viability. The site will, in all likelihood, remain a good wind resource and may well have a useful life beyond 40 years, however any value, and associated increase in NPV, of this option has been ignored for the purposes of our analysis.

5. **VARIABILITY IN INPUT VALUES TO THE ANALYSIS**

5.1 Mr Gallagher correctly points out that there will be variations in many of the input values to the financial analysis over time, in particular the electricity price, which has proven very volatile in the past. In performing our analysis of the project and reaching a view on its viability, both Deloitte and WEL have carried out extensive sensitivity testing and used a variety of predictions of future wholesale electricity prices and other parameters. The NPV's presented in my previous statement of evidence represent the best current estimate of the various parameters which will affect the project over time.

6. **MISSING COST ASSUMPTIONS**

6.1 In performing DCF analysis of an electricity generating plant in New Zealand, it is important to understand how the market in which it operates functions. Mr Gallagher's analysis of the "integration cost" of wind capacity in the United States and Canada, is largely irrelevant to the Te Uku project.

- 6.2 As the project is deemed to be partially embedded in WEL's own network, it actually receives revenues from the grid system operator rather than incurring costs. These revenues have been included in the financial analysis. The situation relating to the allocation of grid services charges to individual plants has yet to be finalised in New Zealand. The financial analysis of the Te Uku project includes a cost for such charges. Whilst these costs are small this is a conservative assumption.
- 6.3 Mr Gallagher further refers to mechanical and other failures at various wind farms around the world and implies that these should somehow be budgeted for in the financial analysis. The potential for and timing of equipment failure and any consequential loss is impossible to predict over a 40 year horizon and hence cannot be factored into cash flow projections. The risk of such failure however is clearly one which any generation plant operator is exposed to and this risk is factored into the rate of return, or hurdle rate, which the operator expects to earn for bearing this risk. The hurdle rate of 10.1% fully reflects the assumption of operating risks by WEL and the financial analysis also reflects the costs of mitigating or reallocating this risk through insurance and warranty costs.

7. **SUMMARY**

- 7.1 The principles upon which the analysis of the Te Uku wind farm project has been based are proven and virtually universally accepted as the basis for making an investment decision. The course of action taken by WEL, including pursuing environmental consents and continuing to incur other development costs, is consistent with the results of its analysis and the state of the information it possesses at this stage of the project. WEL is acting in the same manner as any other responsible corporation faced with similar information and a similar investment decision.

Paul Callow
February 2008