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LET Capital Number 3 Limited Partnership

Attention: John Southworth

Dear John

# Waiuku Wind Farm Fast Track Referral

### 1 Introduction

It is proposed to establish a wind farm of up to 18 turbines and ancillary structures, known as the Waiuku Wind Farm (**WWF**), at 612 Forestry Road, 260 Thomson Road, 136 Thomson Road, 191 Thomson Road, 44 Robertson Road, 76 Robertson Road and 66 Huarau Way (the **site**). SLR Consulting NZ Ltd (**SLR**) have been commissioned to undertake an assessment of acoustic effects associated with the construction and operation of the WWF.

As part of the resource consent application phase, SLR's role is to evaluate compliance against the Waikato District Plan's (the **Plan**) requirements and relevant rules for noise. SLR would identify appropriate additional control measures, if necessary, to result in reasonable noise effects.

### 2 Applicable Waikato District Plan Requirements

The Plan requires construction noise to be assessed using standard NZS 6803: 1999 *Acoustics – construction noise* (NZS 6803). This is consistent with the approach across most of New Zealand the Proposed Waikato District Plan.

There are no specific performance criteria for noise from wind farms in the Plan (Franklin Section). However, the Proposed Waikato District Plan requires wind turbine noise to be assessed using standard NZS 6806: 2010 *Acoustics - Wind farm noise* (NZS 6808). This is consistent with the approach across most of New Zealand.

### 3 High Level Review

#### Construction

Due to the large separation distances from turbine locations to dwellings, noise from anticipated daytime construction activities would be expected to comply with the relevant limits at surrounding properties.

Operation of an onsite batching plant is being considered to enable construction of the concrete foundations/pads. This has been identified as located in proximity to turbine location 10, approximately 700 m from the nearest project non-involved dwelling. At this distance SLR anticipates that compliance with the night-time noise limits can be achieved at surrounding project non-involved properties. Detailed assessment of construction noise would be undertaken to confirm this outcome.

#### Operation

A number of options exist to control noise from wind farm operations should this be required; these include reduced noise/power modes, blade modifications and using alternate quieter turbines. SLR has undertaken an initial review of the proposed 18 turbine layout. This initial review indicates that compliance with the limits in NZS 6808 can be achieved at the non-involved properties surrounding the wind farm through reduced noise operation at selected turbine sites (commonly referred to as sound optimised modes). The specific details of which turbines and which modes would be identified during the detailed assessment which would be is to be prepared to support the application.

## 4 Experience and Qualifications

SLR's acoustics and vibration team has been involved on more than 60 wind farm project commissions across Australia and New Zealand. The acoustic assessment would be overseen and managed by Peter Runcie. Peter is an Technical Director at SLR and an acoustic specialist with over 15 years of experience in the field of acoustic consultancy. He has worked on projects in New Zealand, Australia, the UK, Europe and the Middle East across infrastructure, commercial, residential, healthcare and educational sectors, related to environmental impact assessment (EIA), building services and architectural.

Peter's experience encompasses a wide range of projects from planning applications for single items of plant through individual turbine reviews and large scale environmental impact assessments for mixed use developments and infrastructure; from inception through to construction and completion, commissioning and peer review. He also has extensive experience in building acoustics providing advice to ensure both occupier comfort and compliance with local standards for residential, commercial, educational and leisure developments.

He undertakes technical peer review work for Councils across New Zealand. Peter has also appeared multiple times in the Environment Court as an expert witness.

We trust the above serves to supply the information required, should you have any queries please do not hesitate to contact us.

Yours sincerely

PETER RUNCIE Technical Director

Checked/ Authorised by: GR