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WINDFARMS SOUTH OF DUNNING

**KNOWEHEAD
SNOWGOAT GLEN
LITTLE LAW
GREENKNOWE**

Cumulative Noise Impact

**Dick Bowdler
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Cumulative Noise Impact

1 INTRODUCTION

Planning applications have been made for three wind farms and one is in the advanced stages of scoping in the area south of Dunning. These are Knowehead, Snowgoat Glen, Little Law and Greenknowe. I have prepared, or will be preparing assessments of the noise sections of the Environmental Statements for these proposals. I have not discussed the cumulative implications in my individual assessments and this paper is intended to fill that gap. I do not have precise turbine locations at present for Greeneknowe but I do not expect this significantly to change my conclusions.

2 PROPERTIES AFFECTED

The situation is that there are some properties bordering the B934 between Dunning and Yetts O’Muckhart that will be subject to noise from more than one wind farm should they all go ahead. I set out here, in qualitative terms, the effect of this on those properties.

Based on the assumption that there will be a potential for noise impact anywhere within 2km of a turbine, the table below shows those properties that are affected by more than one wind farm. The dark shading indicates the wind farms that may affect each property. The pair of initials in the head of the columns indicates the name of the windfarm.

	KH	SG	LL	GN
Knowes Farm	■	■		
Knowes Cottage	■	■		
Cockersfauld	■	■		
Blaeberry Toll	■	■		
Greenhill Cottage	■	■	■	
Greenhill Farm	■	■	■	
Corb	■	■	■	■
Littlerig			■	■

3 EXTENT OF CUMULATIVE IMPACT

In the semicircle upwind of a turbine I would not expect that a property more than about 700m away would suffer any significant noise impact. So when wind farms are on opposite sides of a property and turbines are more than 700m away I would not expect that there would be a significant accumulation of impact. However, in weather conditions when they are unaffected by one wind farm they may be affected by the other, so the duration of exposure may be longer. Where there are two wind farms within the same semicircle in any particular wind direction I would expect there would be the potential for cumulative impact – that is to say an increase of noise level due to the two wind farms.

3.1 Knowes Farm, Knowes Cottage, Cockersfauld and Blaeberry Toll

These properties have Snowgoat Glen to the West and Knowehead to the East. There will be no significant cumulative effect but a longer duration of exposure to noise.

3.2 Greenhill Cottage and Greenhill Farm

These properties will have a cumulative noise effect from Snowgoat Glen and Little Law. They will also suffer from a longer duration of noise because of Knowehead.

3.3 Corb

The properties at Corb will have a cumulative effect in all wind conditions from at least two wind farms. They will also suffer from almost continuous noise exposure.

3.4 Littlerig

This property will have a cumulative effect from Greneknowe, Little Law and Snowgoat Glen when wind is in the west or north.