

James Archdale - Submission: White Rocks Wind Farm Application Number MP 10_0160

From: "Greg Williams" <gwilliams@nbntv.com.au>
To: <james.archdale@planning.nsw.gov.au>
Date: 6/07/2011 12:06 PM
Subject: Submission: White Rocks Wind Farm Application Number MP 10_0160
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James Archdale,
Dear Sir,

I am writing to you in regards to the proposed White Rocks Wind Farm project.

NBN Television owns and operates a commercial television repeater station at Carpenters Hill, just outside Glen Innes. This station is responsible for supplying commercial television services to the town. The broadcasters involved are NBN, Southern Cross TEN and Prime. The input signal for all services comes from Mt Dowe near Narrabri which is a 160km path. This has been operating for 20 years with acceptable performance.

I have been in contact with a project manager working on this project in the beginning and we discussed the potential impact of the wind turbines on the input signal.

I am quoted in the Environmental Assessment document, appendix 6, section 4.1. Unfortunately this information is now invalid as the locations of the wind turbines have changed and several units are now in the direct line or within the first Fresnel zone of the signal passing through that area. The interference research done by the proponent is quite correctly based on ITU-R BT.805. I refer to paragraph 2 of page 11 of the Environmental Assessment:

"It also indicates that interference may extend beyond 5km where the receiver location is shielded from the direct signal, but in direct line of sight to the turbine. The form of interference, if experienced, will depend on the relative positions of the wind farm, the transmitting station and the receiver."

This is a similar situation that we find ourselves facing. The Environmental Assessment document does not describe the effects of wind turbine blade rotation on a digital television signal but from our experience it potentially could result in a complete loss of input signal to the re-Transmitters due to their inability to regain a locked condition due to the cyclic nature of the interference, should it occur. This also applies to viewers receiving the signal directly from Mt Dowe. Should the interference prove to be above acceptable limits for the operation of the digital television re-Transmitters used at Carpenters Hill the people of Glen Innes could be without commercial television until it is rectified. Typically this could take from weeks to several months. Obviously a very unacceptable situation.

While it is recognised that the major impact to our input signal will be from the Glen Innes Wind Farm project, any mitigation planning by the Glen Innes Wind Farm to overcome their interference problem could be negatively impacted by the White Rocks Wind Farm interference.

Thank you for your attention to this matter.

Regards,
Greg Williams

Greg Williams
Broadcast Engineering Manager



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