

## Chapter 13 – Where an insensitive developer gets between a man and his TV signal<sup>1</sup>

(sub-titled: don't get between the electorate and their TV signal)

In the latest NSW wind farm Assessment (Biala), the Department wrote in the suggested Conditions of Consent:

“Prior to the construction of any wind turbines, the Applicant must:

(a)... and

(b) implement measures to minimise the risk of television broadcasting interference due to the development at residences H03, H05, H06 and H07.

Clear and concise (but incomplete as the measures implemented should be documented and published and accepted. See further.)

This was because the Biala consultants, DNV GL, (also the Jupiter consultants) wrote in regard to potential impacts on terrestrial television transmission :

“A total of six (6) houses were identified in the potential interference zone for the Black Mountain broadcast tower near Canberra. Two (2) of these dwellings are stakeholders.

DNV GL by comparison, wrote in the equivalent section of the Jupiter EIS:

“A total of 119 dwellings were identified in the potential interference zone for the Black Mountain broadcast tower near Canberra. A total of 111 and 93 dwellings have been identified in the potential interference zones from the Mt Gillamatong and Knights Hill broadcast towers respectively.

This is the inevitable by-product of proposing a wind farm in an area of rural residential character.

There is a subtle difference of emphasis between the two EISs. The Jupiter one should read, in fairness:

A total of one hundred and nineteen (119) dwellings etc.

(Note, the reference to stakeholders has been omitted. For Jupiter, they become an insignificant part of the problem. Hopefully their lease agreements have them covered. Those residents tempted to sign a Benefit Sharing Agreement, should make sure they don't use up their yearly pittance solving their own reception issues, TV only being one of them.)

Let me translate that guarded consultant opinion above:

### **The Jupiter wind farm will have a catastrophic effect on television reception in the surrounding area**

Another nail in the coffin of the Jupiter wind farm.

How many residences will actually suffer television signal interference is unknown but it will be a significant number.

What Mr Young would describe as being at the “upper range” for NSW wind farms, or could he force himself to call it unique?

The actual number is unknown as the turbine model causing the interference is unknown'

---

<sup>1</sup> This is similar to the anatomical connection between a male and the remote control.

The final location of turbines after micro-siting is unknown  
The current signal strength at each residence is unknown  
Which of the three signals each residence receives and uses is unknown  
Which mitigation measures has each residence already been forced to implement is unknown  
The experience of local experts would not appear to have been sought.  
The knowledge gained from other local wind farm developers who severely impacted television transmission eg Taralga in 2014 and 2015, appears not to have been sought.

Without this information, we can only assume that the residences located in an interference zone will suffer. DNV GL nominates 180 residences.

How then, can DNV GL claim for Jupiter in an identical<sup>2</sup> paragraph to the Biala one:

“Thus, although digital television signals are generally unlikely to be susceptible to interference from WTGs in areas of adequate signal strength, interference could be encountered in areas where reception is marginal and antennas at dwellings may receive a reflected signal from a WTG that is of sufficient power to interfere with the signal received directly from the transmitter.

That statement may have been defensible for a project with 4 impacted non-associated residences, but to attempt to use it here without supporting evidence is patronising.

We know that wind farms affect television signals. Just before Christmas 2014, many residents adjacent to the partially built Taralga wind farm suffered losses of their TV signal. For a short time the developer claimed innocence, as they would. Mitigation strategy 5, below, was a partial stopgap measure (over 100 devices were installed). The ultimate solution, a relay station, was finally commissioned in November 2015. That delay is unacceptable. Funnily, a relay station was part of the recommended project as outlined in the Director General’s report in 2005.

### **Mitigation.**

DNV GL gives a list of mitigation options:

- “1. realigning the householder’s TV antenna more directly towards their existing transmitter;
2. tuning the householder’s antenna into alternative sources of the same or suitable TV signal;
3. the installation of more directional and/or higher gain antenna at the affected dwelling;
4. relocating the antenna to a less affected position;
5. the installation of cable/satellite TV at the affected dwelling; and
6. installation of a TV relay station.”

Many of us have already been through the process in the quest for a reasonable signal. For instance, I installed individual high gain analogue and digital antennae, correctly aligned, pointing at the best transmitter (Black Mountain) together with a mast-head amplifier.

So, for me and many others, we’ve been through the first four mitigation suggestions. The fifth might be acceptable if the developer pays the costs for the life of the project.

There is no guarantee that option 6 will solve the problem for the many affected residences.

---

<sup>2</sup> Two instances of turbine/wind turbine were replaced by WTG.

## **What should be done?**

There is only one course of action if a true merit assessment is carried out (ie one without reliance on the “public interest” and “government policies”)

This huge issue should be added to all the others as evidence that the Jupiter wind farm is the wrong project proposed by the wrong developer in the wrong place, and the DA rejected.

Should that be too much of a challenge for the Department, then we should start with the Department’s Biala Conditions of Consent and include in the Jupiter equivalent:

“Prior to the construction of any wind turbines, the Applicant must:  
implement measures to minimise the risk of television broadcasting interference due to the development at residences J75B, J76A.....J97C.” (all 180 of them individually listed)

To which should be added:

“These accepted measures must be documented and published.”

To me, that implies going straight to mitigation measure 6. Thinking ahead, does a TV retransmission tower require Planning approval?

Given the seriousness and magnitude of this issue, and, as these remedial measures are unlikely to be successful for all 180 residences and others that will inevitably surface, there should be an incentive for the developer to fix the problem, along the lines of:

“Should Electro Magnetic Interference be brought to the developers attention during commissioning, no more turbines shall be commissioned, and the turbines causing the interference shall be shut down, until the issues are resolved.”

Should the Department not take the requisite action, when the issue inevitably blows up, they cannot say they weren’t warned.

Time permitting, onto two other key rural communication essentials, mobile telephony and internet connectivity.