## Objection to EPYC Pty Ltd - Jupiter Windfarm Project

## **Noise Impacts**

I wish to submit my objection to the subject Project because of the expected noise impact emanating from the proposed windfarm and its possible effect on my health as well as to my neighbours.

Noise impact affecting sleep, peaceful enjoyment of one's property and in some instances causing headaches, nausea and long term harm to general health are common claims from residents already living close to wind turbines.

The National Wind Farm Commissioner, Andrew Dyer has stated succinctly

"There is always noise from wind farms"

though developers often claim there is not.

Scientific research shows wind farm noise is far more disturbing than general noise at the same loudness, from any other common source. That really matters when you are trying to sleep. As reported by the 2015 Australian Senate Select Committee on Wind Turbines, that is why a number of people near wind farms have abandoned their homes.

Not everyone is affected by wind farm noise and for those who are affected it is not necessarily all the time. Multiple factors are involved: atmospheric conditions, wind speed and direction, wind shear, terrain and noise aggregation (result of noise emitted by multiple turbines simultaneously). Most of these noise sources are generated more than 100M from the ground consequently residences up to 10km from the nearest turbine have been found to suffer excessive levels noise, especially what is referred to as infrasound (low frequency sound lower than 20Hz which is the 'normal' limit of human hearing).

As one might expect it is noise at night which appears most often to be important since this is usually the quietest period and generally when residents are trying to sleep.

Sleep deprivation is one of most common complaints from people living near windfarms. Incidentally sleep deprivation is also a common tool used in torture regimes.

Headaches are another common complaint from people living near wind turbines as well as dizziness, nausea and a feeling of overall un-wellness.

Unfortunately, the EIS for the Jupiter windfarm does not produce separate noise forecasts for day and night. This may have been more useful in determining the truth about noise generated by wind turbines under varying conditions. As one might expect the noise produced at night might be the same as the noise produced during the day but the effect of the noise may well be different and more impactful when other factors are taken into account, e.g.

- background noise levels day v night; and
- atmospheric conditions moisture, temperature, wind, stillness, cloud cover, convectional air currents, terrain, vegetation, etc.

It would have been very useful for continuous noise monitoring to have been conducted over a long period under multiple weather conditions at an operating wind farm so that a meaningful baseline could be established. Unfortunately, there is currently no requirement for infrasound to be monitored near windfarms. During EPYC's so-called consultation phase there were many claims that there would be no noise, particularly for those living on the westerly side of the project. For anyone who know this area, the wind tracks from every direction and no-one will escape the sound of these turbines.

However it is clear that there is sufficient anecdotal evidence from people around the world who complain of the symptoms outlined above for authorities to be sufficiently concerned about what is being proposed without scientific evidence to confirm or rebut the claims. Even some members of the Australian parliament have concerns that windfarms may have potential health impacts (Tony Abbott and David Leyonjhelm).

Surely not all claimants can be dismissed as crackpots or liars without solid evidence to the contrary. For decades, the population was told that asbestos was safe and indeed it was used widely in homes throughout Australia. Now it is outlawed. I see windfarm noise as a similar concept where the population is fed the line by the proponents that there is no or little noise produced by wind turbine generators. However, I expect to see in decades to come where it will be proven that infrasound is detrimental to human health.

I contend that the Jupiter Windfarm should <u>not</u> be approved for development until it can be scientifically shown that noise generated by the wind turbines (singly or collectively) has no potential health impacts.

I strongly suggest that windfarms are <u>not</u> the answer to renewable energy and that the Department should not approve any further windfarm development in NSW including EPYC's Jupiter Windfarm Project.