

# On Special Pleading by Murderous Orphans

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## Objection to the Proposed Jupiter Wind Farm

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*Many of us have heard the story of the person who, having been convicted of murdering his parents, demanded mercy from the court because he was an orphan.*

This is essentially EPYC's gambit in the EIS they have submitted.

EPYC's proposed wind farm will impact an enormous number of properties and residents. However, EPYC and its consultants have declined to identify all of the affected properties or to assess the full impact on each property because there are too many of them and it is therefore claimed to be too inconvenient and too expensive.

The only reason it is too hard and too expensive for EPYC and the Department to do the job properly is because EPYC decided it wanted a wind farm in a wholly inappropriate place.

For many people the magnitude of each separate form of impact will not be high, but the combination of all the forms of impact will have a major effect on their lives.

The developer must be required to:

- produce, for each property potentially affected by Jupiter, a comprehensive statement of all the various forms of impact on that property, including those from Jupiter and all other intrusive government approved developments;
- make a rigorous assessment, for each property, of the aggregate of those impacts;
- where any form of mitigation is proposed, show the net effect for the property taking into account all the forms of impact after mitigation; and
- do so for all properties with development rights (including dual occupancy) within a catchment area that fully covers the ZVI; allows for full distance of potential wildfire impact; allows for full noise impact (not simplified modeling); includes full telecommunications impact, properly assessed; and takes account of the extent of additional traffic hazard for all parties.

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The only reason it is too hard and too expensive for EPYC and the Department to do the job properly is because EPYC decided it wanted a wind farm in a wholly inappropriate place. Everyone knows this, including the developer's consultants and the Department.

And now having spent millions of its Spanish investors' money on creating a grossly misleading EIS, the developer wants the Department to accept the fact that they have not carefully determined and described the full impact on many hundreds of landowners and their properties. It would be misfeasance by the Department to accommodate this outlandish expectation.

### **Huge Number Potentially Affected**

There are more than 250 dwellings within 5 kms of the proposed wind farm, and more with development rights. There are hundreds more within 7 or 8 kms. Note, Tarago is conveniently just outside the 5 kms bound used for estimating noise impact.

There are probably hundreds more within the ZVI – except EPYC and its consultants have not identified all those properties, it apparently being too hard and inconvenient.

Did EPYC advise all of those landowners of the proposed wind farm and the potential impact on them?

### **Failure to Ensure Accurate Identification of Affected Properties and Residents**

ERM gives us a list of identified properties, all within 5 kms of the wind farm, and tells us these properties and their distances from the wind farm are:

*“Based on data provided by the Proponent on 13 May 2016 and estimations utilising aerial imagery. **ERM did not undertake any mapping of identified dwellings to verify the accuracy of this data.** (emphasis added)”*<sup>1</sup>

Murray Curtis and Claire Burnes certified<sup>2</sup> that the EIS:

“contains all available information that is relevant to the environmental assessment of the development” and

“with the information contained in the EIS neither false nor misleading”

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<sup>1</sup> *Jupiter Wind Farm EIS*, Table 4.4, p. 4.14.

<sup>2</sup> *Jupiter Wind Farm EIS*, p. 2.

The Department needs to determine now Curtis and Burnes were able to make that certification given ERM's statements about the source of information on properties considered and ERM's admitted failure to verify.

### **Deliberate Exclusion of Many Affected Properties**

ERM also tells us that:

“the EIS and associated technical studies which, for the purpose of assessing impacts, were prepared based on the dwellings being constructed and occupied.”<sup>3</sup>

The revised EARS issued for Jupiter explicitly require examination of the impact on all:

“subdivisions with residential rights”<sup>4</sup>

not just those with “dwellings being constructed and occupied”. Thus ERM tells us that the EIS does not comply with the EARS. It has ignored:

- all properties with dwelling rights but not yet approved DAs;
- dual occupancy rights on many of the properties within the former Palerang Council;
- all properties beyond 5 kms.

Given the magnitude of deliberate property exclusions practised by EPYC and its consultants, ***it is very possible the real number of properties likely to be affected to some degree is two or three times that reported in the EIS.*** We do not know the exact number because the developer and its consultants refused to do the necessary work.

### **Full Impact on Affected Properties and Residents**

For every one of the properties included, plus those excluded, and potential residences on dual occupancy blocks, it is important to identify:

- visual impact
- noise impact
- disruption of telecommunications, including TV and mobile phones
- increased wildfire risk, through increased risk of starting fires and increased difficulty in combating them
- traffic hazards, for anyone who regularly uses the roads (Goulburn-Braidwood from Goulburn south, and others) that would be used to service the construction and operation of the wind farm.

### ***Visual Impact***

The full 12 kms ZVI (truncated in the EIS<sup>5</sup> but obtained subsequently) shows locations at almost 12 kms potentially have views of 27 or more turbines and some locations at 10 kms

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<sup>3</sup> *Jupiter Wind Farm EIS*, p. 4.7.

<sup>4</sup> *Jupiter EARS*, 2 March 2016, p. 3.

<sup>5</sup> *Jupiter Wind Farm EIS*, Annex F, pp. 52-53.

potentially have views of 70 or more turbines. However, since the EIS did not identify most dwellings beyond 5 kms (let alone undeveloped properties with development rights) the EIS lacks the information necessary to determine the visual impact on the large number of properties not considered.

Note that having views of 27 turbines, let alone 70 of them, even if 10 kms away, would normally be considered a massive visual intrusion. But in this EIS they all get wished away.

### ***Noise Impact***

The noise impact modelling in this EIS stops at 5 kms. No doubt coincidentally, the wind farm is just 5 kms from the closest Tarago village houses.

Because of the peculiar characteristics of wind farm noise (emitted from a geographically dispersed array of noise sources, each more than 100 metres above ground level), often refracted by atmospheric conditions, including atmospheric layers and wind shear, and complex topography, noise does not consistently decline with distance from a wind farm.

The National Health and Medical Research Council has stated it is not possible to accurately predict wind farm noise <sup>6</sup>:

“Wind farm noise is complex and highly variable in character (e.g. tonality, frequency content and impulsivity).”

“When multiple wind turbines are producing sound, the total sound pressure level at a particular location is affected by the sequence of the arrival of the sound.”

“It is not yet possible to predict the complex and highly variable characteristics of wind farm noise (e.g. amplitude modulation).”

If it is not possible to predict something then it is, by definition, impossible to model it, since modelling is the use of formulae or other mechanisms to create a prediction.

To make matters worse, in relation to noise modelling, DNV-GL explicitly says <sup>7</sup>:

“It has also been assumed that the noise emissions from the WTGs and substation do not contain tonal noise or any other special audible characteristics.”

Those noise characteristics are part of what makes wind farm noise far more annoying than most other industrial noise. They are the characteristics that the Department says warrant a 5 dBA penalty. But the EIS just ignores them and yet claims to accurately model noise impact on properties within 5 kms, and to have a legitimate basis to ignore properties beyond that range despite those properties also being exposed to the peculiar and offensive character of wind farm noise which DNV-GL ignores.

This becomes even more pertinent in relation to cumulative impact. The EARS require:

“consideration of potential cumulative impacts due to other development in the vicinity. Particular consideration should be given to other nearby existing and

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<sup>6</sup> *Information Paper: Evidence on Wind Farms and Human Health*, NHMRC, February 2015, pages 15-16.

<sup>7</sup> *Jupiter Wind Farm EIS*, Annex E, Executive Summary, p. 2.

proposed wind farms, including Woodlawn, Capital I, Capital II, and Collector wind farms, and Capital Solar Farm”<sup>8</sup>

Most of Tarago will be within 5.5 kms of Jupiter and 6.5 kms of the Woodlawn wind farm. There is no indication the proponent has attempted to model that dual impact. Given the NHMRC advice, if it is not possible to accurately model the noise impact of one wind farm on properties, it is even less possible to do it for two wind farms at similar distances from those properties.

Since the EIS has arbitrarily, but conveniently, ignored “tonal noise or any other special audible characteristics” from Jupiter, it must necessarily have also ignored those noise characteristics from other wind farms and in the noise combination from other wind farms.

What attempt has been made to determine noise for a property such as Merigan Station, which is currently 5.3 kms from Capital (to its west) and 5.9 kms from Woodlawn (to its north). It would also now be 7.5 kms from Jupiter North (to its north east) and 8.5 kms from Jupiter Central (to its south east).

The property already experiences audible noise from the existing wind farms. The Jupiter turbines would each be twice as powerful as those of Capital and Woodlawn, would be about 50% higher, and with much longer blade lengths.

So the construction of Jupiter would make Merigan almost completely surrounded by wind turbines. Merigan is not unique. There are a number of other properties in that situation, including those in the general Mount Fairy area. Many are a little outside the 5 kms from Jupiter and similar distances from Capital and/or Woodlawn wind farms.

There is no evidence in the EIS of recognising and attempting to reliably determine the potential cumulative impact on those properties.

### ***Telecommunications Impact***

The EIS makes ignorant, condescending comments about potential impact on mobile phone reception and the people dependent on that reception. It says<sup>9</sup>:

“In general, for areas with good coverage, interference to mobile phone signals is unlikely. However, for areas where the reception is likely to be marginal, such as those where an external antenna is required, the possibility for interference exists if a WTG intercepts the signal between a mobile phone and the tower.

In case of marginal network coverage, simple procedures are available to mitigate interference, such as moving a short distance to a new or higher location until the signal improves, or using an external antenna to improve the signal.”

Anyone who lives in the locality knows that poor mobile reception is common throughout the area both on many properties and throughout public areas such as roads. It is bad enough we have to put up with these problems without a wind farm making them worse.

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<sup>8</sup> *Jupiter EARS*, 2 March 2016, p. 3.

<sup>9</sup> *Jupiter Wind Farm EIS*, Annex K, p. 15.

The idea of just moving a short distance to get adequate coverage is ridiculous. Come and try it out here. How often do DNV-GL, ERM, EPYC or the Department's officials put up with this problem in their personal lives?

The suggestion of an external antenna displays again the ignorance of the developer and their consultants and the assumption people here just sit in their homes. They don't. They are out working on farms, riding horses, walking their properties and working them in other ways, or fighting fires and providing other community services away from a fixed location. An "external antenna" is risible in these situations.

When living their lives on their property they want to be able to maintain communication. Partly for normal business and social needs when people call them but in particular to seek help in the event of an accident, or snake bite, or other health emergency, or discovery of a problem such as a fire starting. Mobile communications can be life saving in these situations or help prevent a dangerous situation getting out of control.

The EIS says that due to Jupiter some hundreds of properties may have TV interference from one or other TV transmitter but, so long as they currently get good reception from another transmitter, that will be OK. Except that the EIS makes no attempt to determine whether the potentially affected properties are able to get reception from the transmitters that it presumes are alternatives. In many cases, properties in this area cannot get good reception from the alleged alternatives. Consequently the source to be impaired by the wind farm is often their only effective source.

Because DNV-GL failed to do the baseline work to determine the actual TV reception situation for each property, they have produced no more than rampant optimism in service of their client, without any demonstrable connection with reality.

According to DNV-GL <sup>10</sup>:

"The method used here to assess the potential interference to television signals from the Project represents a **simplified approach** (*emphasis added*) which is expected to capture locations where interference is most likely to occur. This simplified analysis is deemed appropriate as the implications of potential television interference are reasonably low given the large range of mitigation options available."

So they used a "simplified model" rather than an accurate determination process because they think any problems will be easily fixed (e.g. change your antenna direction) without having conducted a proper baseline study to determine whether those fixes will work for each of the potentially affected properties.

Again rampant optimism on behalf of their client instead of careful analysis building on proper baseline data.

It is also noteworthy that on a number of potential interference matters (e.g. wireless internet and impact on emergency services communication) they claim they contacted relevant parties and got no response. They then treat that as meaning no problem.

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<sup>10</sup> *Jupiter Wind Farm EIS*, Annex K, p. 22.

That is an unsupportable approach. It is the responsibility of the proponent to prove there will be no problem, not the responsibility of other parties to prove there will be one. The other parties do not work for EPYC. They, such as ISPs, have no responsibility to commit their time and effort to determining whether the wind farm will create a problem and no responsibility to subsidise EPYC or ERM.

The developer needs to spend their own resources on that and, if they want information from other parties about adverse impacts, they need to be prepared to pay those parties to provide it. EPYC has been willing to spend money to get information helpful to its case. It is, apparently, unwilling to spend money that will ensure a true picture where that may be unhelpful to its case – despite Curtis and Burnes certifying that the EIS “contains all available information that is relevant to the environmental assessment of the development” and is not false or misleading.

### ***Wildfire Risk***

The Currandooley fire, started by the Capital wind farm on January 17<sup>th</sup> 2017, travelled about 12 kms and burned out more than 3,000 hectares in about eight hours. The infrastructure of the Capital wind farm played no part in actually stopping the fire that was started by the wind farm.

Had it been a catastrophic fire day, the Currandooley fire would have likely continued much further across the Goulburn-Braidwood Road and burned many kilometres more. That fire has unarguably demonstrated the ability of wind farms in this region to start wildfires that will reach properties at least 12 kms away and under extreme conditions much further. That fire demonstrated the blather about fire risk in the EIS is just that, with no connection to reality.

The potential wildfire impact of the Jupiter wind farm must be determined for properties 12 or more kilometres from the wind farm.

### ***Traffic Hazards***

During construction in particular, the project would add a large increase in heavy traffic on the Goulburn-Braidwood Road, from Goulburn down to the Manar area and on side roads. It may also add heavy traffic to the Kings Highway.

The Goulburn-Braidwood Road is not designed or constructed to carry such traffic including very big loads (e.g. turbine parts and blades). There would be an increased risk to every person using the affected roads and waiting near them (e.g. school children). The full impact of this for all potentially affected parties has not been assessed and must be.

### ***Cumulative Impact***

The EIS gives cursory and very limited attention to evaluating some cumulative impact with other wind farms. As noted, that assessment is totally inadequate. But, in any case, it misses the big cumulative impact from Jupiter itself.

Residents of a very large number of properties will experience visual impact, noise impact, telecommunications impact, increased wildfire risk and additional traffic hazards. There is no attempt to consolidate the overall impact on each of the residents who will be affected.

***For many people the magnitude of each separate form of impact will not be high, but the combination of all the forms of impact will have a major effect on their lives.*** The EIS makes no attempt to document this. It needs to and the Department must reject the EIS until that is done.

The EIS treats each of these forms of impact as an academic exercise, trying to isolate them from all the others and trying to minimise the claimed impact of each in isolation.

In so doing, it ignores the inconsistencies between the parts. For instance, we have the risible proposal to plant trees near many properties as “plausible mitigation” for VI. This “solution” destroys the view valued by residents. But it also would increase wildfire risk for many of those properties. Of course the wildfire section of the EIS ignores the increased risk to safety proposed by the developer’s VI consultants.

The EPYC/ERM approach is like seeking insurance when you have early stage diabetes, a heart murmur, mild epilepsy, and developing emphysema, and trying to convince the insurer that, if they consider each of those ailments on its own, your health is not too bad.

The insurer is not going to consider the ailments individually. It is going to consider the ailments collectively in assessing your health and insurability. The Department needs to take precisely the same approach in assessing the impact of the wind farm on each property and its occupants.

In addition, the EARS require “consideration of potential cumulative impacts due to other development in the vicinity”. This requirement is not limited to the cumulative effect only of other wind farms. It includes all other government approved forms of intrusive development, such as the Woodlawn Bioreactor which, according to Veolia, currently accepts around 20% of Sydney's putrescible waste and manages to impose a stink on some properties.

## **Conclusion**

The developer must be required to:

- produce, for each property potentially affected by Jupiter, a comprehensive statement of all the various forms of impact on that property, including those from Jupiter and all other intrusive government approved developments;
- make a rigorous assessment, for each property, of the aggregate of those impacts;
- where any form of mitigation is proposed, show the net effect for the property taking into account all the forms of impact after mitigation; and
- do so for all properties with development rights (including dual occupancy) within a catchment area that:
  - fully covers the ZVI;
  - allows for full distance of potential wildfire impact;
  - allows for full noise impact (with tonality and other noise characteristics such as amplitude modulation associated with wind farms), including for all properties subject to the combination of Jupiter with Capital, Woodlawn,



Capital 2 or Collector wind farms at the distances where the combined effect has the potential to be non zero;

- includes full telecommunications impact, developed with proper tools (not “simplified” ones) and using full baseline data of current telecommunications reception; and
- takes account of the extent of additional traffic hazard to which each party would be exposed as a consequence of the Jupiter wind farm.

Until that is provided, the proposal must be rejected.