Objection to EPYC Pty Ltd - Jupiter Windfarm Project

Energy Alternatives

I wish to submit my objection to the subject Project because the proposed windfarm is **not** the panacea that will provide Australia with reliable, stable, inexpensive, clean energy for future generations.

There are many reasons why it is strategically damaging to NSW and none of them are discussed in EPYC's EIS e.g.

- There are already more than enough industrial wind turbine projects in the national pipeline.
- The US has just turned away from "renewable energy" and back to fossil fuels, changing the global competitive environment to pursue less expensive, reliable energy – countries that do not, will see their economies and employment weaken further.
- In addition, our own Federal Government is reconsidering the use of clean coal technology e.g. IS DICE THE ANSWER?

It is claimed that Direct Injection Carbon Engine (DICE) technology will clean up Australia's coal industry. The CSIRO says that unlike traditional generators, DICE technology:

- can provide rapid response power when renewable generators aren't meeting demand;
- is modular, meaning it can be added to existing plants when old units are scrapped;
- requires half the capital investment of conventional technology; and
- could encourage a new export market for the coal slurry, which is non-flammable, environmentally benign and can be safely transported and stored.

Why is it that Nuclear Energy is not promoted when Australia has vast amounts of uranium yet to be mined?

Australia is a vast land with an abundant supply of raw material that will provide energy security for generations to come. Being a vast land it also has the space to store our own nuclear waste. Yet the community lacks the enthusiasm for it because of some misguided sympathy for a minority group and concern over something they don't understand. More importantly, governments lack the intestinal fortitude to promote it for fear of losing their 5 minutes of fame whilst in office.

Instead of grabbing the opportunity to promote and educate the population as to the real benefits of nuclear energy they shy away from it, afraid that they will diminish the self-awarded benefits of being in government.

Other countries have nuclear energy and the majority have an impeccable safety record and have been providing energy security for decades.

It is acknowledged that there have been a few major accidents at nuclear sites around the world as people are quick to point out "What about Chernobyl?, What about Fukushima?

Well what about it? There are always disasters around the world – that's a fact – you live with it, learn from it, improve on existing systems and move on.

Statistically, nuclear energy is a safe, reliable method of providing electricity and one Australia needs to embrace and actively pursue.

Australia needs to pursue Solar energy more, too. Currently there are three operational large-scale solar PV projects in NSW, with an installed capacity over 200 MW: the Nyngan Solar Plant (102 MW), which is the largest solar farm in Australia, the Broken Hill Solar Plant (53 MW) and the Moree Solar Farm (56 MW). These solar farms generate enough electricity to power 75,000 NSW homes each year.

NSW solar farm projects with around another 1,000 MW of capacity either have planning approval or are seeking approval. These projects are located across NSW in regional areas including Manildra, Temora, Gunnedah, Parkes, Griffith, Dubbo and Glen Innes.

But we need more. In the words of Dorothy McKellar:

"I love a sunburnt country,

A land of sweeping plains," etc. etc.

These words provide the answer to a modern dilemma. We have a country bathed in abundant sunshine and we have millions of uninhabited square kilomtres to accommodate numerous solar farms.

Solar farms are far less intrusive on the landscape. They are installed on homes, office buildings, industrial sites and factories across the country. I suggest that, for the most part, people don't even notice them as they go about their business. Photovoltaic panels are designed to reflect as little light as possible (generally around 2% of the light received) to maximise their efficiency, absorb sunlight and convert it to electricity. Where appropriate, low-line vegetation buffers are included as part of the planning approval of a solar farm to minimise visual impacts. This is where mitigation can work – it can't be applied to 173+ meter tall wind turbines.

Solar farms do not make any noise apart from enclosed minimal mechanical noise from the inverter and transformers with cooling fans for temperature regulation. The enclosed control centre is also located at the centre of the farm so that any noise generated during the day is maintained within the boundary of the farm. There is no noise at night.

During plant operation, photovoltaic modules emit no pollution, produce no greenhouse gases and use no finite fossil-fuel resources. For large scale solar projects which typically have a life of around 25 years, the energy payback would be between two and three years, depending on the solar panel type chosen. The Nyngan Solar Plant, for example, will supply approximately 231,000

MWh of electricity per year, avoiding some 203,300 tonnes of greenhouse gas emissions (CO2 equivalent) per annum.

Generally, solar farms are located in areas where vegetation clearing is not required. If clearing is unavoidable, offsets are required. Any EIS must consider measures to minimise, avoid and/or offset biodiversity impacts in accordance with the relevant Commonwealth, NSW and local guidelines.

Dual land use should also be considered with the solar farm development so that landholders can continue to utilise land for grazing beneath the solar panels. Solar panels could be raised sufficiently to allow sheep/cattle to graze beneath.

A typical solar farm life span is 25 to 30 years which is similar to a wind farm. The decommissioning also includes the requirement to rehabilitate the site, with the aim of returning the site to its pre-existing condition. Unlike the Jupiter Windfarm Project (and I suspect other windfarms) all infrastructure (above and below ground) presumably is removed, allowing agricultural land use activities or other land uses in the area, to resume.

I contend that EPYCs EIS outlines a project with a multitude of impediments to overcome, indeed, impediments that other methods of energy production have overcome or don't inherently have. To overcome the impediments will cost a considerable sum which inevitably will be passed on to the consumer. Decommissioning will ultimately also become the responsibility of the landholder who will bear the cost because at the end of the life of the Project, EYPC will magically become 'insolvent'.

The EIS should be rejected and the Jupiter Project **not** approved to proceed.

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