

**The Director – Energy Assessments
Development Assessment
Department of Planning and Environment**

By submission to: www.planningportal.nsw.gov.au/major-projects
From email: stino@ozemail.com.au

15 May 2022

Attention: Andy Nixey

**Objection to MOD 2 – Project Layout Changes
Walla Walla – 300 MW Solar Electricity Generating Works**

Dear Sir,

The continuing destruction of the Australian countryside is unacceptable to Australian citizens who support country residents in their objection to the irrational development of environmentally destructive wind farms and solar farms.

When determining any land use primary consideration should be given to the principles of ecologically sustainable development as stated in:

Federal Legislation - Environment Protection and Biodiversity Conservation Act 1999

3A Principles of ecologically sustainable development

The following principles are *principles of ecologically sustainable development*:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;

Considering each of the aforementioned principles:

3A (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations

Solar farms are short term installations. The push for nuclear energy in Australia and the rest of the world to provide reliable, sustainable, affordable energy while not emitting carbon dioxide will, in my opinion, see this project, if approved, become a stranded asset. The United States has approved the development of Small Modular Reactors (**SMR**) and the British Government has provided 400 million pounds to Rolls Royce for the development of their SMRs. The French Government has similarly committed to SMRs and the Dutch Government has just committed to build 2 nuclear power stations. Finland is constructing 2 nuclear power stations. China is also constructing new nuclear power stations.

Nuscale, an American company, has contracted with the Utah Associated Municipal Power Systems, to construct a 924Mwe power plant at Idaho Falls, Idaho, which will be fully operational in 2030. Nuscale have also proposed the use of SMRs to repurpose coal fired power stations in the United States. <https://www.nuscalepower.com/newsletter/nucleus-fall-2020/featured-topic>

When considering environmental issues there is a dark side to renewable energy. Much emphasis is placed on the worldwide production of carbon dioxide by the burning of fossil fuels. What isn't discussed is the life cycle of PV solar panels which includes the sourcing and mining of raw materials to enable the manufacture of PV solar panels (See the enclosed Appendix A – The Dark Side of “Renewable Energy” – Phases 1 and 2).

Increasingly tenuous supply chains for PV solar panels puts at risk Australia's energy security and therefore national security.

Social impacts include the use of forced labour by some PV solar panel manufacturers in the production of PV solar panels. If forced labour is used in the manufacture of only one solar panel that is one too many. (See Appendix A – The Dark Side of “Renewable Energy” – Phase 4)

3A (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation

Again, there are threats of serious and irreversible environmental damage associated with the manufacture, installation and decommissioning of PV solar panels. (See Appendix A – The Dark Side of “Renewable Energy” – Phases 1, 2, 3, 5, 7, 8 and 9).

Decommissioning:

Decommissioning of solar farms will be required and is essential. The Mining Industry is required to submit Rehabilitation Bonds. Upfront bonds for solar farms to be held in trust for sites to be returned to 'pre-solar farm' purposes. The bond must be for an appropriate amount as determined by detailed calculations in relation to each solar firm site.

Decommissioning and Rehabilitation Plan (DRP) should be mandatory, especially to consider the method of disposal of the PV solar panels. Currently there is no cost-effective methodology for PV solar panel disposal. (See Appendix A – The Dark Side of “Renewable Energy” – Phase 10).

3A (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;

Rural lands, developed for solar farms, have been used for agricultural production for well over 100 years. Managed properly they could continue to be used for agricultural production for centuries to come. Solar farms are short-term installations and will not provide meaningful jobs for the local community during their short lifetime as opposed to ongoing employment for locals if the land is continued to be available for agricultural production.

Australian agriculture accounts for 0.55% of land use (427 million hectares, excluding timber production in December 2020). The value of the land for the proposed solar farm, I believe, will increase significantly over coming decades because of the need to provide cropping and grazing land for the benefit of future generations.

It is short sighted and short term to continue to reduce available agricultural land by building PV solar farms on RU1 rural land. (See Appendix A – The Dark Side of “Renewable Energy” – Phase 8).

There is an ancient Indian saying:

“We do not inherit the earth from our ancestors, we borrow it from our children”

The Statement of Environmental Effects has not considered intergenerational equity.

3A (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;

The conservation of biological diversity and ecological integrity should not only be considered in relation to the local areas. The life cycle of PV solar panels should always be considered in relation to ecologically sustainable development

Extracts below from Appendix A – The Dark Side of “Renewable Energy”

“Phase 1 – Raw material sourcing – Environment Destruction

“A global “gold rush” for energy materials will take miners into remote wilderness areas (that) have maintained high biodiversity because they haven’t yet been disturbed.”

(Praeger University, Mark Mills – *What’s Wrong with Wind and Solar* – at 3.06
<https://www.youtube.com/watch?v=RqppRC37Ogl&feature=youtu.be>)

Phase 2 – Raw material mining – Environment Destruction, Toxic Waste

“The transition towards a renewable energy and transport system requires a complex mix of metals – such as copper, cobalt, nickel, rare earths, lithium and silver – many of which have only previously been mined in small amounts. Under a 100% renewable energy scenario demand for these metals could rise dramatically and require new sources of primary and recycled metals.”

(UTS – *Institute for Sustainable Futures – Responsible Materials Sourcing for Renewable Energy Report* - April 2019 page ii)”

Phase 3 – Raw material processing - Environment Destruction, Toxic Waste

“The manufacture of solar panels requires significant natural resources including quartz, coal, silver, copper and highly toxic rare earth elements. Mining those resources is damaging to the environment and destroys habitats.

Processing those natural resources requires generation of significant amounts of electricity. In particular, construction of photovoltaic (PV) cells (i.e. solar cells) requires the extraction of silicon from quartz (i.e. silicon oxide) using carbon. “The first step of solar PV production is gathering, transporting and burning millions of tons of coal, coke and petroleum coke – along with charcoal and wood chips made from hardwood trees – to smelt > 97% pure mg-Si from quartz”. Large quantities of coal, coke, charcoal and woodchips must be burnt, with a consequential substantial release of CO2 into the atmosphere. A “vast amount of deforestation [is] necessary for solar PV production”

(*Why Do We Burn Coal and Trees to Make Solar Panels?* Thomas Troszak, 14 November 2019, para 2, paras 3 and 15 and reference notes [14] to [16])

PV solar farms, should be considered, not as a contributor to the prevention of anthropogenic climate change by purporting to reduce carbon dioxide emissions and being environmentally friendly, but through their life cycle, as a threat to conservation of biological diversity and ecological integrity.

It is ridiculous that Australia is currently not effectively using its abundant uranium resources to provide an affordable, available, sustainable and reliable energy generation network for its citizens and businesses. The development of Small Modular Reactors which are now a reality in the United States, will be available within the next decade to repurpose Australia's coal fired power stations.

The Federal Government should remove the prohibition on nuclear energy. Australia is the only G20 country where nuclear energy is banned by Federal law. Nuclear energy will enable Australia to achieve net zero emissions of carbon dioxide in an affordable, reliable and environmentally friendly manner. Nuclear energy will meet Australia's energy needs. Equally vital, it will meet our national security needs as it does not rely on supply chains that are becoming more tenuous.

I oppose permission being given for the development of PV solar energy farms in the Precinct.

In my opinion, PV solar farms, will become stranded assets. Developers of solar farms must be required to provide a realistic Rehabilitation Bond, to be held in trust for the land to be returned to 'pre-solar farm' purposes

Yours faithfully,

Bill Stinson

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