24 September 2019 (sent November 20)

Attention Emma Williams
saplanningcommission@sa.gov.au.


Dear Emma,

I would like to provide informal feedback and catch up on the proposed changes to Renewable Energy Policy in the Planning Design Code.

I have contributed previously on this matter via the Productive Economy Policy Discussion Paper and specifically requested that two matters would be acknowledged in the “What we Have Heard” response document. One of these matters was for:

**A “Develop on Clear Land” Principle**

It is requested that the Planning Commission acknowledge the recommendation for a Develop on Clear Land Principle. This principle should underpin the direction of the State Planning Framework to support economic growth in a way that does not continue the destruction of native vegetation and natural assets as incidental to planning approvals. Poorly located infrastructure, broad scale native vegetation clearance for solar farms and tourism developments located in parks and native vegetation highlight planning areas where urgent reform is required.

In regard to area consuming solar farms it is particularly important that such a “Develop on clear land Principle is adopted”, because of the land area required and the potential to decimate large areas on intact native vegetation and ecosystems.

In context, Australia is has now achieved renewable electricity generation equivalent to around just 20% of its needs. If we consider that we may need not just a further 80% for Australia’s needs, but may in addition become an exporter of electricity to Asia or an exporter of hydrogen or other energy based products, then the further growth in South Australia as a sunny and windy place could be many times greater than what we have experienced to date.

The good news is that there are real and tangible solutions so that we do not need to trash our environment and ecosystems to play a large role in the energy transition. Wind electricity has a relatively low clearance impact despite having a larger visual impact.

A key opportunity lies in those areas of cleared marginal grazing land that sit Above the Goyder line which would provide key opportunities for co-existence of solar farming and grazing, or as marsupial habitat in fenced cat and fox free facilities.
Wind Electricity

I support the measures which provide a sound planning foundation for wind development. Wind farms should be located to minimise the impacts on native vegetation, birds and other fauna. However, compared with solar farms, wind farms are less likely to result in large areas of native vegetation removal.

Solar farms

The Integrated System Plans prepared by AEMO to date do not have sufficient regard to native vegetation, so there is a need for a stronger State Level Planning Framework to provide clear planning direction.

The State Planning Framework is not providing adequate protection for native vegetation, and examples of the Monash Solar Project and Cultana Solar Project provide examples of where the Planning Framework is failing South Australia’s environment.

Of significant concern is the fact that such developments are approved under infrastructure provisions which seem to act as a wildcard for approval without adequate regard to consequences.

Once there is planning approval, then clearance of native vegetation is then granted by the Native Vegetation Council that can do very little to say no, or move to a better location, as they are limited in what can be suggested.

The Monash Solar Farm provides an excellent example of bad planning to approve a solar farm located simply to connect into an existing substation. The Project first won planning approval without regard to the environmental impacts and then native vegetation clearance approval was sought. The proponents Data Report claimed that all of the native vegetation of the mallee swale landscape was old regrowth and not intact but this was largely false. The proponents and the Native Vegetation Council were not required to consider the additional Asset Protection and bushfire Buffer Zones that would occur in the Cooltong Conservation Park, so in essence, the stage was set for total disregard of native vegetation, habitats and the Riverland Biosphere Reserve.

In my submission, I referred to the time based photography from the 1940s and showed that for most of the clearance site. It could be demonstrated that the native vegetation, tree-for-tree, was intact original native vegetation that had never been cleared and it was wrong for the Data Report to claim that it had.

I also showed what I believed would be the inevitable asset protection and bushfire buffer zone burning that would be undertaken by the Department of Environment and Water to reduce their potential risk of a fire impacting on the facility.

The Native Vegetation Council approved the native vegetation clearance with some reduction of area which was probably all they could do.

The key issues to note from this example are that:

1. A general statement suggesting: “Large scale solar farms discouraged from areas of high environmental, scenic or cultural value” will be grossly inadequate. It is likely that only established Conservation Parks would meet the threshold of “high environmental value”, whilst all other areas of native vegetation intact or otherwise, will be described as not intact, not high quality, not significant etc. In south Australia, it could almost be argued that all remnant native vegetation under private ownership is somewhat degraded.
**Recommendation**

It is strongly recommended that the New System Policy strongly discourages development of solar farms in areas of native vegetation, and incorporates suitable asset protection and bushfire buffer zones in cleared land to prevent harm to native vegetation.

2. **The full environmental impact of the development should be considered and addressed before planning approval is granted.** It is an absurd loophole that the Native Vegetation Council only gets a say after a Solar farm receives planning approval, and that much of the consequential native vegetation clearance and Bushfire Asset Protection Zones and Buffer Zones are not considered in the original planning approval. This loophole makes a mockery of the claim that the planning system has regard for the environment. All native vegetation and biodiversity habitat clearance should be defined and addressed by the Native Vegetation Council before planning approval or ministerial approval is granted, particularly because there are so many better alternatives across South Australia.

**Recommendation**

The full direct and consequential impact of native vegetation clearance should be quantified by the Native Vegetation Council and a decision of any native vegetation clearance should be obtained by the Native Vegetation Council before planning or ministerial approval is granted for a solar farm.

3. **All native vegetation should be protected, not just significant native vegetation.** Experience has shown that one of the first claims made by development proponents is that the native vegetation that they wish to clear is degraded and not significant. It could actually be argued that most of South Australia's remnant native vegetation is degraded and not significant.

With climate change, species extinction and risk of widespread desertification, there is no longer any scope for clearing native vegetation at scale when it is just not necessary. South Australia has enough cleared marginal land to accommodate vast amounts of solar electricity generation, but it is acknowledged that it will be necessary to plan ahead as to where substations and transmission links should be located to support such development.

**Pumped Hydro Electricity, Groundwater and Desalination**

The Planning Design Code must anticipate the key impact trigger issues and ensure that there are approval constraints and conditions to prevent significant and cumulative harm to the environment.

**Recommendation**

With pumped hydro schemes the following issues must be addressed, noting the assumption that all water storages and piped systems leak or have the potential to leak:

1. Stygofauna in groundwater beneath pumped hydro operations may be placed at risk.
2. Any sea water that could be potentially used could leak destroying groundwater ecosystems and potentially creating salt scolds that could cause serious and irreversible harm to surface vegetation, streams and ecosystems.
3. Any brackish water or partially treated/shandied seawater used in the pumped hydro scheme could leak destroying groundwater ecosystems and potentially creating salt scolds that could cause serious and irreversible harm to surface vegetation, streams and ecosystems.

4. Polluted water such as from existing mine sites or low quality groundwater, and polluted water at low pH levels could result in serious and irreversible harm to surface vegetation, streams and ecosystems.

I request that I discuss my submission with you if possible.

Yours sincerely

Tim Kelly