INTRODUCTION:

Since the 2012 Ministerial Wind Farm DPA there has been considerable debate about Planning Zones.

The DPA created different Zones including ones concerning a relatively new form of energy production facilities, emphasising Industrial Wind Turbine Energy Projects which were classed to be included in zones where these were to be an ‘envisaged’ development. Another Zone was created where they were not envisaged which covers Adelaide and the Greater Adelaide region including the Fleurieu Peninsula and Barossa Valley vineyard region. These were to be protected for their aesthetic qualities.

Significantly no other region in SA was considered as having such qualities and Visual Amenity was removed from elsewhere as a reason to refuse Industrial Wind Turbine projects. Of course this error of judgement has been hotly contested as every region of SA has significant aesthetically attractive areas, places which tourists travel to visit and locals take pride in. Places such as the Flinders Ranges including the lower ranges, the Coorong, Kangaroo Island, York Peninsula and Eyre Peninsula with the Gawler Ranges and Coffin Bay to name a few. The Lower SE to the south of Mount Gambier has already been classed as a place where these projects were not acceptable by the Environment & Resources Development Court (ERD court) on Visual Amenity grounds, yet after the court case, under the DPA it was not classed as a place of important aesthetic appeal.

The DPA also did not take into account the possibility that these Turbines would grow in size and generating capacity or companies would want to install greater numbers in single projects that would conjoin with other projects overtime.

Now within a short period of time this oversight has and is proving to be a major concern for those living within regions where these turbines are currently permitted with very few avenues remaining for residents to advocate against them.

When the DPA allowed this ‘free for all’ they also did not take into account the increase in size and numbers would also increase the ‘noise’, infrasound and low frequency noise, emitted by the projects. A larger turbine with larger blades will certainly cause a greater impact, greater capacity in any machinery will create greater noise unless significant alterations to design are used. However with these turbines changes are only evident in the size and capacity, the overall design is the same.

Neither was allowance made in conditions of approval for creation of greater distance between turbines and neighbours or in permitted overall height including length of blades.

Within Adelaide and elsewhere there are regulations on the number of stories a building can have, yet these turbines can grow in design and height without any regulations to control them.

It was hope that this investigation and proposed changes to Planning Regulation’s would have taken into account the failings of the previous DPA. Unfortunately it appears not to be the case and the matter of these massive industrial projects intrusion into our regional and rural communities and landscapes has once again been ignored.
From this Draft Policy paper it seems alright for the Adelaide’s skyline to be protected from becoming a mass of concrete high-rise structures, and for the Greater Adelaide area to be considered untouchable by massive Industrial structures but what about the rest of South Australia?

The following are some considerations I believe the report should have taken into consideration, as Planning is something that should benefit everyone and provide for a safe environment for all, with the Precautionary Principal at the fore of every planning discussion/decision.

Firstly, within the Draft Policy paper there is mention of Wind Turbine and Solar Plant Energy projects as well as storage facilities to be located close to the energy Grid. This will ensure the current process of allowing these installations in our premium agricultural and local rural/regional communities continues unabated.

However, this could be avoided if such projects were only approved to be installed along the upper line of the proposed second Grid connection to NSW. This project is destined to go through some areas of very low occupancy as well as land which isn’t used for cropping or other agricultural processes.

Further considerations follow:

1 A limit must be set on the size and capacity of Industrial Wind Turbines. Currently there are proposals for turbines with a capacity of 5MW with a height exceeding 230mts with blades of 150mts in length. Unless there are some regulations limiting the size and capacity then our regional areas will become increasingly places where people and our native fauna, flora and avian creatures cannot live. They will become industrial sites with farming and grazing being eliminated due to loss of soil, hydrology problems and unsuitable for human habitation.

No one to day would condone people living within a massive factory, in the past Industrial zones were created for that very reason.

2 There has been considerable discussion and research into the noise emitted by these Turbines, and the weight of the research is now moving to the acceptance that these turbines create infrasound and low frequency noise/vibration. With medical research showing people are adversely affected by this noise/vibration. Little has been done into the effects on our flora, fauna and avian specie, but it can be concluded that if humans are affected by these emissions so to would be our native creatures.

Yet very little research has been undertaken in this area, yet we are told these measures to produce our energy needs are being undertaken to Save the Environment from effects of Climate Change!

3 There needs to be a complete overhaul of the allowable noise standards which were created many years ago, without the input of current knowledge, understanding and equipment technology. The difference between night and daytime allowable noises needs to receive more scrutiny.
The type of ‘annoyance’ created by these turbines was not understood in 2007 when the Environmental Noise Policy was created. Even the World Health Organisation (WHO) has now accepted there is a problem with how annoyance related to these turbines is assessed.

There is a considerable amount of studies being undertaken into what noise/vibration from these turbines cause but more is needed and results need to be assessed in relation to South Australian environment and population conditions opposed to those in European and other countries. Until then it is necessary for the Precautionary Principal to be applied.

4 Monitoring for background noise before Applications are presented needs to be undertaken using the latest equipment which records Infrasound and Low Frequency noise, these records need to be undertaken outside and inside of homes. The monitoring needs to continue to be undertaken after construction and commencement of operation, once each season for the life of the project. It is not uncommon for machinery to wear over time and this can cause changes to how they operate and noise etc they emit. Therefore, it is not unreasonable for these projects to be assessed each season throughout their life to ensure they are not emitting noise/sounds in excess of their permits.

All records should be made public for the entirety of the projects life.

5 There is a need for a complete overhaul of the regulations concerning noise emittance, with testing undertaken by completely independent experts using equipment designed to record all noise/vibrations including Infrasound and Low Frequencies.

With allowable standards to prevent adverse effects on those living and working close to these projects. This should not be a one level fits all, but should be able to be adjusted to suit specific sites and turbines.

6 In conjunction with this there is a need to ensure the setback from non-participating neighbours is set at a suitable distance, but also that this can be adjusted to work with changes to Turbines size and power outputs.

The current suggested distance from a home or workplace (including dairy, farm shed, stables etc) is 5km. This should be measured from the turbine and not from a dividing fence or roadway which if measured from a dividing fence, road or other could result in the non-associated property being less than the 5km from a turbine.

In addition the distance from a neighbouring properties fence should be at least the ‘topple height’ of the turbine. Which would require a 180mt turbine to be no closer than 180mt from the boundary of a neighbours dividing fence. However, this should be able to be altered when turbines are of a greater size and perhaps even contain an additional few meters to allow for debris being flown should a tower topple, thereby ensuring a neighbour’s property will not be included in any resulting damage.

This ‘topple’ height should also be used along public roads, tracks and walking trails.
At all times it is necessary for there to be the ability for such regulations to be adjusted, especially as research is constantly being undertaken which could require changes being applied quickly as projects are presented.

7 Due to the invasive nature of these projects Development Applications should be subject to public scrutiny and 3rd party appeal rights should be available for all South Australians, as we have a right to protect our environments no matter whether we live there or not.

These Development Applications and all documents must be made available for a period of at least 8 weeks. The complexity of these documents can be difficult for people to assess and time is needed for them to be able to discuss with others and make judgements as to whether they want to object and if they do how to right their objects. Also it has appeared to be common for companies to submit Applications during periods when farmers are at their busiest such as during the cropping season, or in the Summer Holidays when people are away from home, which limits the amount of time farmers and others are able to spend scrutinising Application documents.

These documents should also be readily available on the internet for the life of the projects.

When Approvals are granted then there should be a set period for the project to be completed, with no ability for a company to seek extensions. A suggested period could be 2 years.

Also, should a company wish to alter their approval especially with respect to the type, size and capacity of turbine then they should be compelled to submit a fresh Application with new Reports to ensure the new turbines and their settings will not adversely affect the environment and/or the noise level and setbacks etc approved in the original application.

8 When a company begins preparing to scope for a project they should be compelled to publish such intent in the local media, and either post notices in Post Offices in regional centres and/or send letters to every home and business within the district they are scoping.

When they are ready to contact the Local Authority or Government with a proposal the company and the Authority or Government body should be compelled to notify anyone within a 20km radius of the proposed site. The process of ‘In Confidence’ should not apply to these projects at any stage. The only thing that should be ‘In Confidence’ is the cost of the project and the financial amount they are paying ‘hosts’, though the names of those who have signed up to ‘host’ turbines should be available to the general public as this will indicate the area the project will be located.

9 The practice of offering neighbours money or other incentives to not complain about a project before or once it has been commissioned should be banned, so to should any contract that a ‘host’ signs that stipulates (overtly or by inference) they are not to make any complaint of any kind to anyone at any-time. The practice of preventing people from complaining about something that is wrong is nothing more than a ‘standover’ situation.

10 While this response mainly relates to Industrial Wind Projects, there are other concerns related to the use of land suitable to cropping, grazing and other farming pursuits.
It is now recognised that these turbines are unable to produce sufficient energy for our needs at all times. This has caused the inclusion of ‘large scale’ battery storage. These batteries do not store sufficient energy to supply our needs for anything other than preventing the Grid from collapsing due to the inevitable constant interruptions of generation when we are reliant on the wind to produce the energy.

These batteries require large areas of land, they are an added pressure on our land resources, and they require a secure compound. There is always a danger they will fail, even a car battery can fail without notice. Also, if the wind isn’t blowing to keep them topped up then they need other sources of energy production – gas, diesel or petrol to maintain their usefulness during windless times. This cancels the idea we are receiving energy that is emissions free.

Further these batteries are untested as to how long they will be capable of a useful life, and will at some time require replacing. The cost is extraordinarily high and while we are told the price is/will be less as more are used this has not shown to be the case with Industrial Turbines.

These batteries are an added cost to the public of South Australia, which cannot be recouped unless through additional taxes or levies.

Large Scale Solar Energy productions. There are a number of different types of largescale solar production facilities. One being solar thermal, where panels are directed to a central tower with a solution which stores the energy produced during day light hours. The other is panels laid out across a wide area which are either connected to the Grid or batteries which collect the energy for later use.

Both methods could/do require a great deal of land and research has not been conducted in any great amount into to seeing if the panels can cause environmental problems locally due to the heat they emit. It would seem that these like Wind Turbine Projects would be better suited to being installed along the route of the proposed new Grid connection to NSW.

It would be wise at least in the initial stages to consider approving such projects outside of areas used for cropping, grazing and food production.

Solar, is only available during daylight hours so requires either to be sent directly to the grid or saved using the solar thermal method or batteries. Again batteries require excessively more land and require replacing at a high cost at an undetermined time and could fail suddenly without notice.

There was a small mention about the use of small turbines and the Local Authorities receiving applications. While there are no doubt places these could be useful, there is a need for them not to be approved just because they can provide some wind produced energy to individuals. These need to be assessed on their noise production in relation to where they are located.

Neighbours have a right to live in a place of their choosing in peace, without having to be kept awake at night. Within suburbs there are often complaints about noisy air conditioners and other things such as music with Local Authority rules to deal with such matters, the Local Authority should retain the ability to approve or not approve these Small Turbines, after consultation with neighbours who
have a right to oppose them on the grounds of noise disturbance. This process should extend to places where larger allotments are available for residential living, as noise travels at night and while a small turbine may not be close to a home the noise could become a problem for a neighbour’s peaceful enjoyment of their property.

Finally, the opportunity that the review of Planning Regulations brought left a lot to be desired and much important considerations were not included. Detail in State Planning is necessary to ensure everyone in the State has a right to live a happy healthy and peaceful life. We also have a right to protect the environment from developments that can cause more problems than they are meant to prevent.

The lack of true direction and control of Industrial Energy production sources can and does destroy people lives and the environment.

South Australia consists of more than Adelaide and the Greater Adelaide Environs. And State Planning Regulations should reflect the importance of all districts of the State and the people who live in them.

State Planning is that – State – it is not confined to Adelaide and the Greater Adelaide Environs.

Tourists travel the State and more and more are doing so, to destroy the wonderful environments and vistas for the sake of producing sufficient energy, which could be undertaken at one or two industrial sites using clean coal and/or Nuclear energy, is unreasonable and above all counterproductive in helping to reduce emissions into the environment (production of the turbines, batteries and panels is not environmentally safe), it is also quite likely to be more costly overtime.

Thank you for the opportunity to submit my thoughts.

JA Rovensky