WILL SOMEBODY LISTEN PLEASE?

COUNTRY AUSTRALIANS NEED HELP - URGENTLY

"The Social and Economic Impact of Rural Wind Farms"

Submitted on behalf of The Australian Landscape Guardians Inc.

Peter R. Mitchell, AM
On behalf of The Australian Landscape Guardians
PO Box 1136
South Melbourne Business Centre
Vic. 3205

Tel: 0403.054.480

Email: peterm@lowell.net.au

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SUMMARY

Wind cannot meet either of its two principal purposes, namely to save GHG emissions and to replace fossil fuels in power generation. **To continue to promote it on one or both of these platforms is fraudulent.**

Further every Wind Energy Project appropriates a significant part of neighboring property owners' assets and presents a serious health risk to those families. **This is both casual and cruel.**

Power consumers are actually being forced to fund this ongoing fraud and are thereby, albeit unconsciously, supporting the casual and cruel outcomes.

For capitalists and whole industries to so misbehave is not unknown; tobacco, asbestos and drug industries are examples. Clearly we cannot rely on corporate conscience or even their written Codes of Conduct.

The Commonwealth Government has set this industry up through the Renewable Energy Act and given the industry the carrot of subsidies and the stick of penalties under the Renewable Energy Targets ("RETS"). State Governments have played their part with lax planning guidelines and very clear directions to planning panels in the Victorian case, to have note of Government policy.

Governments at all levels have been informed of the industry's failure on various grounds, as have developers. The response is to ignore, deny, dissemble, delay and, ultimately, to hire the best legal gladiators to keep the scam afloat for another several years.

When governments establish an ideological base for what is actually a complicated policy, the matter tends to be largely focused on the ideological goal, technical matters are put aside or not even recognised; and technically incompetent policies and rules can result. The principal fault in the Renewable Energy Act (the "RE Act") is that it is based on the **false premise** that all renewables save GHG emissions.

By now governments and their advisors should understand that despite their wishes, wind is useless, a mammoth waste of money, and an unreasonable, cruel and uncompensated burden on rural communities and families.

As a modern, wise, and fair society the nation therefore needs to publically admit new and better information has showed that wind is not the answer, and move quickly to adjust its strategy and the methods of achieving its priorities.

How might we do this?

Change the RET to a GHGRT (a greenhouse gas reduction target). This will produce a surge of investment in combined cycle gas turbines(CCGTs).

CCGTs produce 0.5 tonnes of GHG/MWh compared to black coal at around 1.0 tonnes and brown coal at about 1.4 tonnes. By building these CCGTs instead of the presently favoured wind turbines plus the necessary back up OCGTs (open cycle gas turbines) the nation could comfortably meet its GHG reduction target and, ultimately, old coal generators could be progressively retired. The cost of meeting the RET would be dramatically reduced both in capital and operating costs compared with persisting with a failed technology. So power cost increases would be much reduced, there would be less breakdown difficulties in power distribution, no health problems, and the list goes on. Gas supply will not be a problem.

The specialist wind developers will complain, but their complaints will be without substance and easily voided. The large energy companies and grid managers will breathe a sigh of relief and be quietly supportive; many metrogreens will quite possibly say "I always thought there was something wrong about wind" but should quickly see the wisdom of doing something that works, particularly if they understand the large benefits in domestic power costs and security of supply and know that Australia is being exemplary in meeting its GHG emission reduction targets and, no longer, harming country people.

1. THE AUSTRALIAN LANDSCAPE GUARDIANS ("ALG")

There are more than 50 regional landscape guardians groups in NSW and Victoria. The ALG tries to assist those groups with specific advice and connection to other groups in a loose network; and also communicates directly with other groups including governments at Shire, State and Commonwealth levels.

The ALG has no funding of any sort. All the work is done by a small number individuals, who do research, write submissions, publish studies and network in their spare time (most have jobs) and meet their own costs. We are a deliberately informal organisation.

The ALG is not affiliated with any other organisation. Its members and the members of the technical subcommittee are scientists, engineers, economists, lawyers and farmers. Most are members of one or other of the regional landscape guardians groups. None work for any government organisation, fossil fuel producer, green organisation (other than the ALG), or political party; nor have any sold their intellectual soul to any such organisation for life, either in this, or the next.

What members have in common is that they are and have been for much of their life, thinking and practicing conservationists. Landscapes and conservation of the rural environment are our core. We focus on these tasks. We recognise that there are many related problems but are unable to bring resources to such causes. We are certainly not looking for any other bandwagons to jump upon.

Nevertheless we notice and applaud efforts to reduce pollution of the planet by mankind. We understand the interest in moving towards renewable energy, but are bewildered by ongoing and substantial financial and other support to a renewable technology (wind) which does not save GHG emissions and is destructive of landscapes, the environment, country peoples' lives and assets, and the economy.

The ALG is particularly focused on preserving landscapes; just as the various State based National Trusts have, in the past, focused on cityscapes. In fact the first group, the Victorian Landscape Guardians, was formed by National Trust of Victoria office bearers about a **decade ago**, frustrated by the city based emphasis of that organisation.

With our focus we have concluded that that the greatest current threat to landscapes, iconic and otherwise, in South Eastern Australia is the proliferation of wind turbines forcing wholesale and gross change upon large tracts of land. Dealing with this growing problem has necessarily involved us in detailed study of wind technology which, in turn, has convinced us of the imperative of bringing a proper and full view of this industry to the public and to policy and law makers.

The purpose of this submission is therefore to try to organise the principal facts about wind; and present enough information and proof¹ to cause these facts and conclusions to become key inputs into a necessary revision of the way we encourage and manage renewable energies and wind in particular.

Given the ALG's view that the topic is of major and national importance and our experience of achieving little in earlier efforts and submissions, the important statements herein are consciously made in the clearest possible language.

One major contribution made by the ALG to lifting the veil on wind power has been the development by ALG affiliated engineers in their own time, of a programme to download otherwise impenetrable wind power output data that the AEMO is required by law to publish, into something anyone can understand and interpret. A second may have been a late January shutdown of certain turbines at Waubra that may not have been in compliance with the planning permit.

¹ mostly through a selection of documents included in the accompanying Reading and Reference files.

2. FOREWORD

Many Australians (particularly amongst our large and well educated middle class) are supportive of the hypothesis of an impending Anthropogenic Global Warming Disaster (the "AGWD") and the "we must do something" corollary.

This conviction is particularly evident in our major cities (hence the categorisation of **metrogreens**) and therefore required serious consideration by our political parties, all of whom say, in various ways and degrees, that they support the AGWD hypothesis and the taking of steps to "do something". Politically wise perhaps; but possibly leading to technically incompetent solutions, in this case, wind.

Not surprisingly the various bureaucracies located as they are in cities (hence the categorisation of **metrocrats**) have fallen into line; with, on this matter, seemingly greater than normal enthusiasm and diligence.

Our experience is that most city dwellers are poorly informed in the relevant topics, and neither are they familiar with, or interested in, any derivative problems flowing from the deployment of wind projects (although some are wondering why their power bills are rising), especially for rural residents forced to live with turbines.

As a result, with the dual convictions that "the science is settled" and we must immediately move to foster renewable energies, governments have moved quite decisively to make, administer and require laws and regulations accordingly; without thinking about the resultant secondary outcomes. Secondary they may be to most politicians, metrocrats and metrogreens; but absolutely primary and fundamental to those who see themselves, at least in this matter, as being treated as a **rural underclass**.

We mention the above as it is important for this submission to start from a clear understanding of the background to, and reasons for, the drive for renewable energy in general, and wind energy in particular.

This broad support and a political desire to respond to the expectations of the metrogreens has created, through legislation, a renewable energy industry powered by subsidies, Renewable Energy Targets ("RETs") with punitive consequences; and encouraged by planning guidelines that are ideologically, not technically or

humanely driven. The inhumane treatment of rural families is commented upon in Sections 4B and 4C of this submission.

But let us move on, the principal difficulty is that renewable energy tools do not currently exist in the form needed: wind is deployable but has a series of practical insurmountable problems; solar can make a very expensive and a partial contribution; and most other forms of renewable energy have limited capacity and/or are in the developmental rather than deployable stage.

Infuriating and unfortunate as it may be, **technology has either not kept up with, or informed, our political objectives.** Its not however that governments around the world have not been told that wind does not make any net savings in GHG emissions, and told again and again^(B1a-j).

The secondary difficulty is that we have presumed that renewable energy is synonymous with "clean" (ie., no GHG emissions) energy. There is also a strand of thought that we need renewables now, or at least soon, as fossil fuels are shortly to run out. The latter alarm is irreconcilable with the facts; and the former presumption is perhaps an oversight; probably a genuine error made in the course of "lets show decisive action and be out there acting correctively". But, sadly, not correctly.

This submission focuses on the good and the bad of generating power from wind. The submission starts from the basis of the generally held view that anthropogenic greenhouse gas ("GHG") emissions from power generation should be reduced.

The submission concludes that, in this requirement, wind has little to offer and does much damage.

However on the presumption that it will be some years before nuclear power is acceptable to the public, the submission does offer an alternative solution that will cause no problems, economic or social; and will achieve what we, as a nation, set out to do. That is, to reduce our GHG emissions from power generation, albeit at a significant lift in the overall cost of power, but much less than that caused by employing wind.

3. THE PARTIES INVOLVED

Our Foreword dwelt on the background of the generation of power from wind, and attempted to identify how we arrived at the point where a Senate Inquiry is both proper and timely. It indicated that our support as a nation for converting the kinetic energy of wind to useful power is misdirected for technical reasons and also, we will show, for the fallout damage to humans.

In this context we have three major groups with different and conflicting views and we believe it is important for the Committee to understand that this is essentially a conflict between city and country and that conflict needs resolution.

Some relevant information about the parties and their views follow.

3.A. Governments

Governments and the metrocrats have, as stated above, "created" the conditions for the wind industry through legislation and guidelines, to solve the perceived problem of the AGWD. Their interest is, of course, not to admit that there might be problems with power generation from wind, but to **maintain the illusion** that they have made a major contribution to solving the problem by encouraging wind energy developments.

Criticism of governments' attempts to "pick the industry winner," namely wind, has heretofore been most unwelcome and, in Victoria at least, straight out ignored. We are informed, but do not claim, that this attitude played a contributive part in the recent change of Government. Whatever the truth of that matter, it is time that both governments and oppositions realise that this criticism is going to increase; become technically very specific, and will likely threaten future voting patterns. Let us not have the response of exasperation, "well, we have to do something!" rationale. A faulted and failing solution is simply no solution.

3.B. Objectors

It has been left to affected members of the rural underclass to object to Wind Energy Projects ("WEPs"). To some, their objections just appear as the same "tired old list" of identified problems. Notwithstanding the fact that the problems raised are real; **objectors' claims have largely been ignored by legislators**, and by some of

our important means of communication, e.g., including the daily newspapers such as the Melbourne Age and, until recently, the ABC.

We now see this "hear and speak no evil" as in a process of change

3.C. Developers

Developers that profit directly or indirectly from these projects **always** deny that any of the objectors' named problems exist.

The larger developers, e.g., AGL and Origin, cleverly let the Clean Energy Council do the hard yards, namely, the issuing of the most brazen denials; and use their own relatively low level staff to persuade the often unsophisticated local farmers to the wind party line²; one on one, no witnesses, no argument, no liability. Directors of the major power companies do not want to know about any faults in their wind development strategy let alone the grubby local sales tactics.

3.D. The Metrogreens

The metrogreens are generally uninformed about wind energy and, as yet, show little curiosity. They happily inhabit this space pontificating at their coffee houses and dining tables about renewable energy and wind. They are reinforced in this space by regular misleading updates by the industry, compliant and committed journalists, metrocrats and the political imperative of demonstrable action on Global Warming.

In a very real sense the industry and the objectors are competing for the minds of the metro greens, with government still interested in following polls, not sound policies. If one knows much about capitalism then one knows where the balance of the resources and power lies and, if you know more about capitalists, you will realise that truth and concern for others never stood in the way of a profitable, let alone a subsidised and guaranteed profitable, industry.

² such as "Don't you want to save the planet? Your neighbours are having them. There are no noise or property devaluation problems. Opponents don't understand," etc.

4. THE PROBLEMS OF WIND ENERGY PROJECTS

This section attempts to categorise the **major** problems with wind in the hope that, by simplifying the analysis, this will help the Committee in its task. So we have identified the major problems of **purpose**, **location**, **health and fire** as matters for this submission.

4.A. Problems of Purpose

- 1. The mandatory Renewable Energy Target (RET) of 20% of the energy sold by power companies having to be sourced from renewable energy by 2020, is physically **unattainable**^(B2a,b).
- 2. The Renewable Energy Act (the "REA") is based, possibly unwittingly, on a **false technical premise** that all renewable energies save GHG emissions. Unfortunately the major deployable renewable, windpower, does not (B1a-j).
- 3. There are no net savings in GHG emissions from WEPs^(B1a-j).
- 4. Wind turbine generated power cannot replace or retire fossil fuelled base power, nor shoulder nor peak power^(B1a-j).

Not withstanding the faulted target and wind's incapacity to provide net reductions in GHGs or to allow for closedown of coal base load generators, the energy marketers continue to build WEPS as fast as they can. Sound ridiculous? That is because it is.

So our conclusions as to purpose

- 1. Persisting with the deployment of wind turbines therefore is a monumental waste of capital^(B2b): wind turbines have a capital cost 10 times^(B3d) greater per MWh produced than gas turbines; and the power produced, because of its intermittency and unpredictability, is much less useful (valuable). Hence we say, correctly, that wind is high cost and low value.
- 2. Servicing this capital through a necessary and mandated publicly funded subsidy will continue to progressively drive up power costs and, because of the publicly funded subsidies, prices^(B3a,B4a) to all consumers (except,

unbelievably, for the grid power drawn, but unmeasured and not paid for, by WEPs!).

3. It is inevitable that net job losses from installing wind projects (B3e,f,g) and anger over power prices in the cities will ultimately overwhelm industry spin. Thus the politically chosen solution will probably become an embarrassment and a monkey on a then government's back.

4.B. Problems of Location

The States' Guidelines are **designed to promote the deployment of WEPs**; **not to control where they may go and should not go**. Thus Metrocrats, taking a very clear direction from their political masters, actively and indiscriminately help developers place turbines in relatively closely settled farming areas; simply because the area has good wind and the project will be close to power grids.

Developers move around the countryside like post American Civil War carpetbaggers, soliciting the most likely acceptors of turbines (usually identified for a fee by a suborned local). The sales pitch is delivered and deals done over the kitchen table with, to say the least, **inadequate disclosure** and secrecy clauses.

ASIC style disclosure, which should in future be required either by law or direction, would solve many subsequent problems and properly and fully let the poor farmers know what they are letting themselves and their neighbours in for.

The Developers follow the wind atlas and the power grids, **regardless of the pre- existing inhabitants** and the likely effects turbines will have on these unfortunates.

Developers do this for profit maximisation and **because the near useless guidelines say they can.** "Our project is in accord with the guidelines" is the ultimate defence.

The (always denied) consequence is the value of homes and farms properties are substantially impaired, depending on their position relative to turbines.

Some acceptors of turbines excluded, no one chooses to live or work amongst or adjacent to, multiple towers and turbines. So there is absolutely no demand for properties but plenty of would be sellers wishing to escape a newly and dramatically changed environment. The law of supply and demand takes over. Victorian projects have caused many to abandon their homes and depopulation is continuing around those projects already operating.

For those fleeing WEPs having to fund alternative accommodation is a cruel, inhumane and uncompensated hardship. Others, of course, are unable to fund moving without selling, they are trapped and continue to suffer, virtually every day of their lives.

The value of a rural property has **three** components: **the productive assets**, being soil, water and working improvements; **the accommodation** asset and the **amenity/location** component, being location, environment, landscape, vista, privacy, low noise levels and sometimes heritage or iconic values.

Placing turbines in the vicinity of a property actually **appropriates the whole of the amenity value and part, at least, of the accommodation value.** This appropriation, if uncompensated, is considered by residents as **government mandated theft, and we see no reason to disagree**. How long can this theft be denied?

Not much longer perhaps, because a North American municipality has recently required a would be developer, apparently in strong denial of property value decline, to place his money closer to his mouth by adding a **property value guarantee** to residents who wish one! A legal document to give effect to this has been drafted and is available.

Rural dwellers in the way of WEPs who complain about their properties amenity and landscapes are ignored or sent form "file closer" letters that arrogantly ignore intelligent and proper questions.

So our conclusions as to location

- 1. Turbines and people do not mix.
- 2. The Rural Underclass are boiling with frustration and anger about the careless, cruel and inhumane destruction of their lives, social structures and assets by developers; and the refusal of governments to listen, let alone address the problems. This disaffected group is growing, now on a quite rapid learning curve and, step by step organising nationally. Further the broadening appropriation of large tracts of land for new projects is adding some very experienced and powerful individuals to the resistance network. Think about class and individual legal actions based on a number of grounds especially health and other matters becoming part of the development "process".

- 3. The amenity and peaceful beauty of country living, so cherished by rural residents, is destroyed.
- 4. The theft of amenity and the right to quiet enjoyment are crimes against country people and must be righted.

4.C. Problems with Health, Noise and Social Issues

1. Health and Noise

The ALG is aware of the health problems of people living near turbines. In fact our vice-president, Kathy Russell, BCom. ACA, was one of the first non industry people in Australia to recognise that a serious problem may exist.

The ALG had no trouble locating an attention focusing number of quality studies^(C1a-q) and documents^(C1k-o) starting with a NASA document^(C1k) in 1990 that associated wind turbines and infrasound. It is clear that developers have had increasing access to information relating to: infrasound from turbines, infrasound and health, and wind turbines and health for up to ten years.

Putting aside the cowboy and quick buck developers, major companies involved in the wind business would, or at the very least should, as part of their own and ongoing due diligence, been on top of any literature that might indicate that this part of the company's business may be harmful to the public. We find it hard not to reach the conclusion that these developers were and remain in default of their clear responsibilities to the public and to their own corporate guidelines. For example see a commentary on Origin Energy's Code of Conduct^(C1j)

As well as doing a literature search, Ms Russell started to talk to people that were suffering ill health and established contact with the previously ignored Dr David Iser of Gippsland, who had treated people from around the Toora WEP showing symptoms of what is now recognised as Wind Turbine Syndrome, some time in 2007^(C1r).

Ms Russell in particular, but other members of local Landscape Guardians Groups, notably the Spa Country and the Western Plains Guardians had their attention further focused when the now notorious Waubra WEP started up in February 2009 and some residents began to suffer unbearably.

These unfortunate people began to look for help. Where would one start? With the developer, Acciona, of course and then with their local GP.

Not a good story, complainants found Acciona's help line unresponsive. So some very sick and angry residents managed to get the attention of the press, including two televised interviews on the ABC programme Stateline. (C1a)

Notwithstanding the growing body of evidence the basic reaction of all developers and their industry body, the Clean Energy Council, is to deny that there are or even might be any health problems and hide behind what we claim to be shamefully inadequate guidelines. Acciona has not demonstrated that it is an exception to this generalisation.

Coincidently a court case has been heard (but judgement not yet delivered) in January 2011 in Adelaide, in which a family, who believe their health is threatened by a new Acciona project, is attempting to stop the development. Health evidence was presented at that hearing by one of the otherwise gagged Waubra residents and reported upon by Brendan Gullifer, a reporter with the Ballarat Courier; and by Dr Sarah Laurie of the Waubra Foundation. We also note that some of the Waubra project's wind turbines have not been operating in late January possibly because of inadequate noise testing and reporting post start up. (C1k)

Lacking a useful response from Acciona, the sufferers take their problem to the local GPs, These doctors, mostly totally uninformed about the links between poor health and infrasound from other industrial sources, search for cause and, not unsurprisingly, are unable to provide a medical solution or the basis for a clear complaint.

Provincial lawyers cannot do much but write a letter or two, but their clients cannot afford to bring a health claim to court. Finally, the sufferer abandons their house and even their livelihood; thereby adding financial disaster to the original trauma.

ALG members start fielding calls from people literally at their wits' and bodies' end. We listen, visit, counsel and show a willingness to become involved. We bring a little more sophistication to finding solutions to the problem by bringing city lawyers and independent noise experts in to help; but because of the nature of our organisation, we can offer no financial assistance.

Our volunteer members are lawyers, economists, engineers and scientists; as well as farmers. Most of us are country dwellers. At least one has been involved in a major health research organisation. As a group we are unlikely to be misled about the presence of symptoms; and our clear conclusion is that these people were indeed sick and some critically so. Confirmation of the presence of symptoms has been achieved through more specialised case data collection and preliminary evaluation now being undertaken by the Waubra Foundation.

Recently a number of events start to offer hope:

- a. Dr Nina Pierpont, an American pediatrician, is so concerned by what she saw around her in her home State of Vermont, that she starts, in her own time and unfunded, to undertake a "Natural Experiment" into health effects of people living near WEPs. After completing that study and having it peer reviewed, she publishes the results and her conclusions in a now well known and readily available book called **Wind Turbine Syndrome** ("WTS"). Make no mistake, her work has been well designed and peer reviewed by a most impressive panel of her peers. Nevertheless she has been criticised by those with a financial interest in the industry and by their favoured "experts".
- b. Channel Seven and the ABC Stateline Programme interview sufferers from Waubra during 2010^(C1a). The Australian public starts to notice. There are more TV programmes in the pipeline.
- c. The ALG support group becomes connected to international groups dealing with the same problems, the same symptoms and the same denials from industry and politicians.
- d. The Waubra Foundation is formed to investigate the adverse health claims and the industry denials. We understand they will be making a submission to the Committee.

Meanwhile the public health system dozes on, and for reasons one can only speculate upon, is unconcerned, e.g., senior staff of the Victorian Department of Health and Wellbeing selected by their Department Head to attend a meeting requested by the Medical Director of the Waubra Foundation, admitted that, despite receiving complaints from sufferers, they had not

bothered to read Dr Pierpont's book! Nor had they considered interviewing sufferers! The only comment relevant to this mysterious lack of concern and activity is that a member of that group opined that "only a few people are suffering!"

How many sufferers are acceptable and acceptable to whom? Is it laziness, inertia, or is the Victorian Department still in their historically rigid mode of "we must not rock the good boat "SS Renewables"?

One would be wit has commented (with the humblest apologies to the members of the committee): "unfortunately the said good ship has no weapons that will fire when necessary, only when the wind blows; it is overladen with the stolen treasure of public funded subsidies; loaded with the weight of a near impenetrateable armour plating of industry spin; and has been boarded and overwhelmed by the buccaneers of the Clean Energy Council. Somewhere, perhaps in Canberra, there is an aged, senile and probably hallucinating Admiral, who has lost his or her uniform and medals, any control of his or her fleet of one ship; and, indeed, the respect of an increasing number of the public".

Sometimes common sense is necessary, even in complex technical matters. Let us try to apply some of that type of sense to more closely identify cause and effect in this matter, so:

What are the matters that point to wind turbines as the problem?

- a. No health problems before start up.
- b. Symptoms are reversible: move away, symptoms abate and (but not always) disappear, move back and they return.
- c. Symptom intensity correlates with wind strength, direction and distance from turbines. No wind, no symptoms.
- d. It has been known from the work^(C1k) published by NASA in 1990 that infrasound causes health problems akin to WTS.
- e. Turbines emit infrasound. (C1k)

f. No other source of the symptoms has been identified; let alone peer reviewed; and there is no direct evidence that turbines do not cause the health problems experienced by some residents.

What are the arguments from the industry?

- a. No peer reviewed studies. To sort this out refer to Nina Pierpont's Book^(C1q). The IPCC, the wind Industry and, to an extent, the NHMRC have seemingly and arbitrarily expanded the previously accepted and understood purpose and meaning of "peer review" to include the requirement of having the findings published in a journal of sufficient scientific standing. That is what academics do when they are trying to build their career and reputation; and not necessarily what one does when there is an urgent need to get information out to health officials, practitioners and the public. It is certainly not what medical scientists do when they are finding a new condition or disease that is actually doing real damage to real people in real time. Still a useful smokescreen if you wish to delay, dissemble and keep the money coming in.
- b. We should note that it is a major and lengthy undertaking for an already employed and unfunded researcher to design a study, collect and analyse the data, write up the study and the conclusions, have your peers review and approve the work; without queuing up to get a summary paper into this or that of next year's journals. Self publishing a study that was too long for publication in a journal was simply the quickest and best way to get the whole of the information out to medical practitioners and the public. This course has been very effective in meeting those objectives; but has been opportunistically criticised (C1p) by the industry and fellow travelers on specious grounds.
- c. Maybe committee members will remember the well honed, but ultimately failing, strategies of other industries keen to wash away health problems perceived by others. The techniques were all variations of a common approach, viz: (1) deny, (2) delay, (3) dissemble, (4) discredit the opposition, (5) engage in major public relations programmes, then, in the end, (6) bring in the big name lawyers to negotiate the exit.

- d. In our view the wind industry is no better or cleverer; it is certainly, with the peer review nonsense, practicing (2) and (3). Also (4) has been in action in regard to Dr Pierpont and, we fear, has started on the Waubra Foundation's, Dr Laurie.
- e. This "no peer review" cloak has also become the dress of the moment by the NHMRC with an unfortunate and superficial desk study most aptly entitled a "Rapid Review". With its lazy, remote, incomplete and possibly biased^(C1i) literature search and the observation of what amounts to: "no peer review no disease" it has delivered an absolute gift to the industry and its supporters, a let off for the lazy, and an absolute disaster for those affected and to be affected; see various commentaries^(C1g,h,i) To its minor credit it did, like Dr Pierpont, suggest further studies.
- f. We suggest the Inquiry consider how these studies might be funded. Study proposals have been solicited by the Waubra Foundation from experts who are ready to start and who have demonstrated their independence of the industry.
- g. Finally there is allusion about possible but probably unprovable causes which, in our view, is dissembling (technique 3). One suggestion is that neighbours who did not get offered turbines might be jealous or envious—so they get sick and leave their homes and farms? Another is that people may feel disempowered by the process and the outcome, leading to stress and on to illness. We know this happens, but it happens before a project is approved, the symptoms are different and are discussed in the following section.

2. Social Issues and Pre Approval Angst

Once secrecy fails and an intended project ultimately becomes general knowledge; neighbours of the hitherto secret project experience a rotating series of emotions which include disbelief, depression, anger, determination not to yield, combined with a near constant state of a high level of stress; and a total focus on the single issue of the invasion of one's property and other rights, to the detriment of any other, even pressing, issues; knowing that expenditures on expert studies and lawyers is not a proper use of

retirement funds, but feeling compelled to spend; generational transition plans and undertakings disrupted permanently.

Then, because one starts to object, being threatened and spooked by some of the neighbours hosting turbines. Not wanting the female members of the family to go into the local town unaccompanied. This experience was replicated in the involved members of the author's family and those of near neighbours not hosting turbines. Whilst these emotions put one's life in limbo for years, these feelings tend to mostly disappear once a planning decision is handed down and are replaced by resignation or, more often, by a cold determination to continue to fight. However the social divisions are expected to remain for a lifetime.

For developers and or the industry to rationalize this torment as envy is disgusting; but maybe it is an insight into the developing organisations' corporate souls and their uncivilised and un Australian practice of ignoring and/or rationalising the cruelty and inhumanity of their actions on nearby neighbours in the search for profit, and the unbelievable socially destructive self interest of not having to endure cash penalties from the government and be shamed for not meeting their RETs.

So our conclusions as to health issues

- 1. Real people are getting really sick. The number of people, the intensity of the illness and the distances from turbines at which this is happening is alarming.
- 2. The problems identified by US, Canadian, UK and now Australian doctors are common, real, serious to the point of life threatening; and widespread.
- 3. The occurrence of these symptoms will **continue** in all operating projects and **appear** in all new WEPs **approved under existing guidelines** and any minor amendments thereto.
- 4. The problem is turbine proximity.
- 5. New illnesses or afflictions do not wait to outbreak until studies have been designed, funded, undertaken, peer reviewed and published. The "no peer reviewed studies" attempt at disappearing the problem is incorrect,

logically inapplicable to this problem at this "outbreak" stage; and **absolutely not a rationale** for continuing with the deployment of the highly probable cause.

- 6. Nothing warrants putting families' health at serious risk.
- 7. New rules must ensure this does not happen. Until the acoustic engineers and the medical researchers have defined acceptable and measurable noise levels and have developed better noise predictive tools; then setbacks to dwellings and workplaces must be regulated to 10 km. This must be retroactively applied to unbuilt but approved projects. If we know that the probability of health casualties of these unbuilt projects is high, then despite the costs of changing the layout of yet to be built projects, our society cannot, in good conscience, proceed with these projects.
- 8. No ifs, whys, or buts.

4.D. Fireaway

Each turbine is an additional bushfire ignition point, about one new ignition point to each square kilometre of these vast projects .A potential ignition point at any time the wind is blowing, or the turbines are being rotated by drawing power from the grid, as they often do, **unmeasured and free**^(B3b,c).

The Caithness Windfarm Information Forum 2010 keeps a record of wind turbine fires and other accidents^(C2a) in Western Countries, but mostly only those reported in the press. They record 154 fire incidents.. So far there have been three turbine fires in Australia including that at Cathedral Rock on 2nd February 2009 and at Lake Bonney on 22nd January 2006 and Starfish Hill. There will be many more as building of approved WEPs accelerates to meet the RET.

Most fires if not all, originate in the elevated nacelle with flaming debris scattered widely by the wind or by still rotating blades.

There is simply no way of fighting these fires at the origination point. The practice is to stand a kilometre away and hope the fire can be dealt with at such a perimeter. C(2b). If it is a high and hot wind day, this strategy will almost certainly fail.

Power gridlines are susceptible to power surges such as emanate from the fast fluctuations in power produced by wind turbines. This creates enhanced danger of fire from overloaded and overheated collection and transmission lines (presumably not ordered underground as it may impair developers' profitability).

South Eastern Australia is one of the most fire prone areas in the world. It is as near a certainty as possible that a turbine fire will soon coincide with a bad fire day.

Conclusion on Fire

A rational decision would involve **refusing WEPs access to fire prone areas** unless the project is in non settled areas and fire poses no other risks to the pre-existing flora or fauna. **All new powerlines to be placed underground**.

4.E. What Else is at Risk or Casually Traduced?

- 1. Flora and Fauna, particularly large birds.
- 2. Landscapes, often historic.
- 3. Water, due to ignorantly and callously placing towers on aquifer recharge areas. Who currently carries this risk? The rural 'underclass' of course! No matter if they depend upon that water for their life and livelihood. Never the developer. A totally unwarranted risk, turbines or water? What kind of a world are we living in when planning panels, developers, metrocrats and presumably their masters choose a handful of turbines over water? A totally inequitable risk to a district's and to individual farmer's necessary and productive assets.

These matters are important, and very important if a project is to proceed. Others will no doubt make submissions on these matters, but the ALG's view is simply that failure of purpose, the huge cost and the elevation of power costs and resultant net job losses should alone be enough to bury this fraudulent industry. If not, add health issues and if the Committee, all things considered, still disagrees; then the Committee needs to examine and seek equitable solutions to the Location, Fire, Property and Water Appropriation issues.

5. BENEFITS OF WIND ENERGY

5.A. Supplements Farm Income for Some Farmers.

Our experience is that often unsophisticated farmers were (and maybe still are enticed to enter what were, in effect, free option contracts with developers without much understanding of what they were letting themselves into. The very limited disclosure and money offered was an irresistible combination to the financially stretched and to those attracted to an easy dollar.

This industry has operated without proper disclosure and country lawyers have tried to understand the one sided free option agreements offered to their clients; but generally had inadequate experience to bring the developers to the point of offering equitable agreements. The unfortunate farmers in some sighted agreements have no recourse to environmental (read health) problems on their own property. For many, the new income will likely not be enough to subsidise a new unaffected dwelling. The number of farmers benefiting is totally outnumbered by those within the surrounding envelope of damage.

5.B. Profits for Developers

These profits are directly funded by power consumers and, through mandating the subsidy of approximately \$40/MWh produced, the government is forcing the consumers to pay developers a **government ordered profit for a useless investment**. A huge tax to support a failed and harmful renewable energy. It is clear that not only has the government (already haunted by gross failures in creating energy related projects) selected another loser, it is, this time, making **the public fund the developers**

5.C. Reduction in the Use of Fossil Fuel

When the wind is blowing and wind derived energy flowing, fossil fuelled generators ("FFGs") have to be backed out of the grid^(B1h). If this meant that the FFGs could be shutdown, then net savings in GHG emissions would result. Because of the ups and downs of wind and the much greater ups and downs of the power generated³, the FFGs (generally gas for this purpose) have to be kept on line and actively balancing

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³ Power generated by a turbine varies by the cube of the change in wind speed

the downs of wind with ups from the gas generators and vice versa. Overall, there maybe some savings in the total fossil fuel consumed (but not much because the balancing gas turbines are operating very inefficiently in this ever changing output mode), but this small saving, if it actually exists and given our massive reserves of gas and coal, is for all practical purposes, irrelevant.

5.D. Jobs and Investment

Wind farm developers know that their original, and at the time persuasive, claim that wind energy was the way to reduce greenhouse gas emissions from power generation, and thereby an important tool in mitigating global warming; **has been shown to be false** (B1a-j). They also know that the cost of wind energy is being exposed as prohibitive (B2a,b) and only propped up on the basis of government mandated subsidies passed directly on to power consumers.

So what benefits remain to place on the positive side of wind power's ledger?

Well, there isn't much, so developers trot out jobs and investment. For example, Origin Energy commissioned a study on jobs to be created by their Stockyard Hill project. Nothing said about the **cost of creating those jobs**, or about **jobs that will be lost** as the increasing cost of power closes businesses down and forces jobs offshore. Let us take a look at these claims.

1. Construction Jobs

The benefit of construction jobs created depends on the state of the construction industry. Benefits are there, particularly if the industry is not operating at capacity. If the industry is near capacity inflationary outcomes could reduce the benefit.

So, good for a period, but unfortunately for the few locals involved, temporary work only. For the local economy, a welcome, but temporary, boost: fencing and road contractors, food and liquor provision, and perhaps some accommodation.

2. Permanent Jobs

Origin quoted 32 new jobs on maintenance and supervision of the then proposed 242 turbines and 52 indirect jobs for their Stockyard Hill project. The latter probably represents work for existing businesses in large provincial

towns. One would have to be a little doubtful that these indirect jobs are all new.

A search on the net tells us much about the cost of new permanent jobs. Spain has been most aggressive in building wind projects. Perhaps wondering why their unemployment had risen to 18%, they studied the effect of investment in renewable energy (mostly on wind) on their economy^(B3g). They determined that each job created by the industry costs the public about euros 1.2 million or in 31 January 2011 dollars \$A1.64. Similar numbers and concerns are emerging in other countries^(B3f), so as the best approximation we can presume similar results in Australia. Thus for the claimed total of 84 new permanent jobs, we the public, will have to foot a bill of around \$A138 million!

The study also been found that increased power costs from wind energy caused the **loss of 2.2 jobs for each job created**. Given that we probably import more of the components in a WEP than the Spaniards, we may lose more jobs for each one created, but using the Spanish figure is guide would result for the Stockyard Hill project paying \$138 million to create 84 jobs and, at the same time destroying 184 jobs; for a net loss of 100 jobs. Our Government is picking winners again!

6. THE AUTHOR

- 1. My name is Peter Mitchell; I am a Chemical Engineer and have always been as interested in the earth sciences as in my own field of study. These interests have led me into being one of a very small group who founded the world's first Chemical Engineering consulting company in New York, to working in the petroleum, petrochemicals, plastics and precious and base metals industries. That is what Chemical Engineers did.
- 2. I have been Chairman of companies listed on the New York, London and Australian Stock Exchanges. I have never worked for big oil, big coal, big wind, or big anything industrial; and neither my mind nor my soul has ever been captured by any such industry. The only big organisations that I have been involved in were, and still are, major Australian institutions including the National Stroke Foundation, the Florey Neurosciences Institute, the Queen's Trust for Young Australians (now the Foundation for Young Australians) and the WWF in Australia.
- 3. My attention was drawn to the wind industry in November 2005 when I accidently found out that my home, a heritage property in county Victoria was to be surrounded by wind turbines. Since then I have spent most of my time researching the industry. I was involved in the formation of the Western Plains Landscape Guardians and the Australian Landscape Guardians which are both voluntary organisations and staffed by very part time volunteers The Landscape Guardians are not affiliated with or captured by or fronts for, or funded by, any other organisation. I am not a member of any political party.
- 4. Most recently I became involved in the creation of the Waubra Foundation which is tasked to listen to, and accumulate data from, individuals and families living in proximity to wind projects and claiming to be suffering post turbine health problems. It also is trying to promote proper and independent research on the problem. No other body was courageous or independent enough to take on this task, despite the clear and inhumane misery being experienced by some people trying to live near newly erected wind turbines.

- 5. As an engineer I was trained to be methodical and objective and to solve problems through a provable and quantitative, rather than an unprovable qualitative, approach. As long as one stays with measured and real facts in regard to wind there is no need for emotion, half truths or spin. The industry simply cannot be justified on any rational grounds.
- 6. I have been through a wide range of emotions and thoughts regarding the destruction by a WEP (Origin Energy's Stockyard Hill Project) of my life and assets; but I do not see bias as one of them. The truth and the whole truth do their own work.
- 7. My purpose is to try to organise the facts about wind; and present enough information and proof to imprint these facts so that they are unavoidable when decisions on wind energy matters are being considered.