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Via email

28.01.2021

OBJECTION TO PROPOSED Hills of Gold windfarm

Application number: SSD 9679 Applicant- Engie

Dear Director,

As a private citizen and owner of property and house next to the Cape Bridgewater Wind Farm (CBWF) in Victoria I am objecting to the proposed Hills of Gold wind energy project based on my experiences living and working in close proximity (450m-900m) to the CBWF, composed of 29 x Senvion MM82 @ 2.05MW (each).

Expert independent assessments, evidence, advice and moving testimonies about existing wf's and the risks to humans presented to Planning Panels are being set aside through decisions based on computer modelling, averaging, poor noise regulations, energy auctions and neighbour agreements; designed to maximise energy production that often in reality create detrimental, irreversible impacts on neighbours, landscapes, and ecology.

The CBWF has been causing nuisance to my family and neighbours for over ten years. Documented and verified issues of noise, vibration and sensation complaints continue despite utilising all established complaints processes, including that of the National Wind Farm Commissioner.

No protective measures to prevent the harm caused to me, my neighbours have been initiated at CB by the Government or developers since commissioning and our complaints are dismissed.

WF's are deemed compliant yet the health impacts, the unreasonable noise nuisance and annoyance continue, forcing us out of our homes as the problems remain unresolved.

At the Victorian, Rokewood wf planning panel hearing, the Panel stated the Victorian Government has an obligation to meet renewable energy targets and regardless of experts and residents' concerns, it seems all over Australia wf's will be built to maximise the number of turbines, despite the many likely increasing negative and cumulative impacts.

Duty of Care.

- The AAT ruling Dec 4 2017, recognised that 24/7 operating wind turbines (wt) emit excessive audible and inaudible sound which causes annoyance and sleep disturbance; Humans are more sensitive to low frequency sound which causes greater annoyance; Noise annoyance is a pathway to some diseases i.e., insomnia, hypertension, cardiovascular disease, elevated blood sugar levels, endocrine disorders, diabetes, obesity, anxiety related illnesses mediated by poor sleep and stress.
- Three Australian Federal Senate Inquiries, 2011, 2012 and 2015 recognised wf health and noise issues, the 2015 Senate Panel visited my home, saw the enormity of the turbines bordering our property; discussed the appalling noise and vibration conditions we endure; and Senators spoke specifically of the impacts on our well-being and lives in Parliament.
- Decision makers have a duty of care to protect the public, be independently informed, to be fair and to not wilfully ignore the Tribunal, and Federal Inquiry recognised anecdotal and factual evidence of wind farm harm being put to you.
- Bias towards developers to condone current noise and health impacts of wind energy industrial developments is unacceptable. Senate recommendations have been ignored or adulterated and have not been adopted to meaningfully make a difference to the lives of those of us already or potentially being negatively affected by wind farms.
- There is no proof or evidence that environmental, visual, noise, vibration and sensation impacts has been acceptably avoided at or near any wind energy developments. This proposal may additionally increase noise and health complaints and enormous cost to communities.

Health Impacts from wind turbines

- Detail and degree of impacts on people can be fully recognised prior to granting approvals, regardless of the size or scale of developments or MW outputs, by heeding the warnings from people like myself that actually experience poor conditions near existing wind developments.
- Act to protect communities from wind farm noise, vibration, and sensations, by staying fully informed and initiating beneficial changes that protect amenity and quality of life.
- Steven Cooper, an independent acoustician investigated the acoustic conditions inside our homes at Cape Bridgewater, and at sites on and around the wind farm. He used inaudible wind turbine amplitude modulated sound, recorded in a CB bedroom, and carefully exposed noise sensitised people to low levels of that sound in a reverberation chamber, in a controlled environment. People have a physical reaction to those sounds without hearing or knowing when the sounds were played and this shows the sensations we have been describing especially when turbines power up or down, are real.
- Noise and adverse health impacts are not a nocebo, or nimby effect. I am now hyper-sensitised to certain sounds that are excruciating due to wf acoustic shock exposure.

- During the Cape Bridgewater acoustic study, Steven Cooper determined the worst symptoms or sensations we had separately documented in our diaries, occurred while the wind farm was powering up or down by more than 20%. This showed a turbine signature or amplitude modulation at an infrasonic rate which is not recognised, monitored, or penalised by using dBA noise measuring. **The AAT ruling found dBA measuring to be ineffective.**
- Over the course of ten years, I have been repeatedly disturbed by wind farm noise. Woken in a blind panic due to the acoustic startle reflex, an unconscious response to something which I cannot hear but feel through my senses which I have no control over. It triggers a flight, fright response, where my 'heart jumps' me into a terrified, disoriented state. I cannot slow my heartbeat or control my blood pressure using relaxation techniques or change any of the adverse impacts until the disturbance decreases or stops. This is not a nocebo effect.
- No-one from the Victorian Health Dept, the Planning Dept or the EPA have investigated my concerns with a hands-on, multidisciplinary research in my home; and despite my pleas for advice and help to understand and manage what is occurring, my complaints are dismissed. I am told to see a GP.
- The acoustic impacts of the CBWF have caused me and others to become extremely sensitised to low frequency noise and sound pulsations. I am now unbearably, affected by urban noise and everyday sounds which were not a nuisance pre-wind farm exposure. Health investigations and treatment is ongoing at our expense. My health has been damaged.
- It is likely to happen to others.

Buffer Zones

- There are cumulative impacts of noise and vibration from ever-increasing number of turbines and renewable energy projects, including solar and battery storage, across many regions and Shires.
- As wind farms increase in height, length, and size, so too should a turbine free buffer zone. Ten kilometres is the independent recommended buffer. More distances between turbines are required to prevent excessive wake turbulence and resulting increase in the soundscape of lower frequency noise and amplitude modulation.
- How many homes and people will be paid off and will not be protected from low frequency noise (LFN), amplitude modulation (AM) or sound energy pulses which cause disturbance in homes and cause health impacts.?
- <https://waubrafoundation.org.au/resources/moller-pedersen-low-frequency-noise-from-large-wind-turbines/> This peer reviewed paper of May 2011 shows that as power generation capacity increases so too will the low frequency noise and annoyance to neighbours.

- Agreements of payments or free electricity and other such gimmicks made between the proponent and neighbours living closest to the wf, will not protect the neighbours from wind turbine emissions causing annoyance and nuisance. It causes the complaints process to be flawed from the start as often these contractual agreements mean being gagged.
- I cannot live in my home due to excessive noise and have abandoned our home and property, others have done the same. This impact is being ignored by Panel Hearings. The NWFC Mr Dyer, has publicly stated; ***'anyone living within 1km of a wind farm who doesn't like the noise should just leave'***. This is unacceptable and is not part of the conditions for a wind farm to operate.
- Protective buffer zones should be a priority with the recognition by the Vic Dept of Health that low frequency noise causes health impacts such as increased noise sensitivity and sensitisation to cause annoyance. (Wind Farms, Sound and Health, April 2013).
- Surrounding vegetation as a mitigation measure is no assurance people will be protected from noise and vibration nuisance from the adjoining project. We have established boundary trees and the intrusive visual impacts, noise, flicker, and reflections remain.
- In SA, Goyder Council negotiated a 2 km setback for the Stony Gap wind farm which use Vestas V90 or V112 turbines.
- Locating this energy development in this location may adversely have noise and health impacts on nearby populations, schools, hospitals and particularly on disabled or sensitised people.
- Wind farm acoustic emissions have been detected by independent acoustician Les Huson and others, across 3 Victorian wind farms over a 70km distance: even further detections from an offshore wind farm 100km distance from London, UK.

Management of project.

- Remote controlling and external facilities monitoring the CBWF has meant the owners are not always aware of what is actually occurring on site at the wind farm i.e., when gearboxes explode, or blades split and spew fibreglass, or fires are burning near the turbines.
- Without effective on-site monitoring there could be a disaster ahead for the local residents.
- There are no staff on site at wf's during normal business hours except while during scheduled maintenance or repairs. This puts the onus on surrounding communities to observe the wind project and report issues to the developer; this is **not** the residents' responsibility.
- Then, communities must endure the movement of heavy equipment, blasting and the associated traffic jams and thumps through the ground when heavy equipment such as cranes are operating. The goodwill of communities across Australia towards wf's are severely damaged and so too is Wind Developer 'social licence to operate'.

- Some wind developers use drones which would be operated under their own set of aviation regulations and should not be based on what the renewable proponent determines. No rural neighbour would feel comfortable with drones and cameras flying over or near their properties and livestock.
- Wind flow is naturally never steady, it stops, starts, blows too hard, too little, so no wind farm is capable of any constancy in supply. Turbines stop and start, breakdown and are shut down for maintenance. Windfarms are deliberately turned off due to market demands etc. We see this every day at Cape Bridgewater and this unreliability is reflected in the energy output graphs at the AEMO and Aneroid websites and in the electricity consumer costs.
- Developers cannot avoid the impacts of industrial noise on people and should not be permitted to bulldoze, force people to sign agreements or abandon homes and habitats, as a means of mitigation. This is not 'minimising' the impacts, it is blatant destruction.

Community Consultations and 'benefits'.

- The NSW Energy Infrastructure Roadmap and Electricity Infrastructure Investment Bill identify the significance of community consent for proposed developments. The majority of the Nundle and Hanging Rock communities and people from all over have signed petitions opposing the proposed Hills of Gold windfarm and 'do not want to destroy the environment to save the environment'.
- Conducting community consultations, developers proclaiming, 'fair and open engagement' and of educating people with propaganda, has not resulted in communities being protected from adverse wind energy emission impacts on neighbours.
- It is not fair and open behaviour to dismiss participants from community consultations, because of a letterbox drop or standing up educating communities, to give a truer picture of what is occurring near many operating wind farms.
- It is not fair to dictate the terms of reference and rules around the meetings without allowing input to those terms by the community being engaged in the process as happened to residents at CB.
- It is not fair when friends of the earth or the wind farm alliance attend public meetings or forums to disrupt them or be a threatening force as happened at community meetings in Penshurst and Ballarat, Vic.
- Media or developer polls are not an indicator of local consensus for the development of a wind farm. Pacific Hydro did a community survey but excluded anyone who lived within a certain distance to an operating wind farm and the results are skewed.
- Public consultations do not prevent horrific surprises to the community while there is denial of the true impacts of wind farm noise and vibrations on people. No-one prepares you for the disturbances, the noise, the rumbles, the vibrations, the limbic fear, the health impacts,

and uncontrolled reactions to the amplitude modulation and LFN which drives us from our homes. No-one cares.

- Openness and transparency of wind energy generators and any commitment to resolve concerns would require using updated noise monitoring not using dBA but looking at the significant turbine signature and alleviating the impacts by altering and modifying the turbines and operations or not allowing them. It would require less secrecy about signing up landholders and letting the whole community know from the very beginning that a wind farm is being proposed for an area. Openness would remove gag clauses and restrictions.
- Monetary payments are not a 'fair solution' to noise and vibration impacts forcing people like me to leave our homes, properties, and businesses. They cannot cover the costs of relocation, rent or purchase of a new home or maintenance of the abandoned home.
- Being 'suitably responsive or concerned or taking complaints seriously' should be the norm for any business but is not an answer or resolution to complaints made about wind developments, while nothing changes.
- 'Sharing the benefits with the community' never makes the destruction of the natural environment, its people, or creatures acceptable. The subsidy reliant operators should not be accredited for giving to the community.
- Government allocation or grants in the millions towards any construction should not be considered any kind of benefit to the local community facing adverse impacts of such a development.
- Government money being allocated towards projects, is not an indicator of transparency, nor is it an indicator of being an independent power producer.
- Targeting children in schools and walkers on trails with signs and information promoting renewable energy, open days and tours of the energy project does not prepare communities or protect them from the real noise and vibration and health impacts on homes and families. It is simply advertising and propaganda.
- Local businesses supporting wind energy are sometimes shunned by long standing customers and residents being adversely impacted. This has reverberations throughout small communities.

Turbine & Planning

- For public safety, health, and well-being there should be a development buffer of more than 1km from people and places of value, the recommended distance is 10km.
- Cumulative impacts of this project and proximity to any other wind farms or proposals in the region must be factored in as a planning issue and cumulative noise issue.
- Increasing the density of turbines and increasing the turbine 'sweep' zone will increase wind shear and turbulence off the blades which predictably causes increased impacts to

neighbours. Larger turbines, blades and bases create a larger mass which do not impede sound pulsations but contribute to an increase in noise disturbance.

- Exhaust fumes, turbine breakdowns, blade splits and lifting, gear box explosions, toxic painting of turbines, oil spatters, additional traffic, workers who do not respect the local environment or local needs, all contribute to polluting the environment and issues do not simply stop post construction as developers imply.
- Regardless of the materials and colours used in this large project, there will still be enormous visual impact on residents and surrounding areas. In comparison to Cape Bridgewater wf, one of the earliest in Australia, these proposed turbines are HUGE and will be visible, like other wind farms are visible, over great distances, particularly when viewed from a height or over open spaces.
- Areas of high or low conservation, our valued landscapes, habitats, and open spaces should be evaluated only by independent ecologists and not by the self- interested developer.
- This nationwide industry is mostly focused on economic gain at all costs. Any redesign of the development to exclude turbines, or somehow protect landholders, heritage listings, wetlands or forests is little hardship compared to the economic situation of towns; which will cease to develop because no-one will want to live inside or beside a wind farm; and no-one who acknowledges the detrimental aspects of wind turbines will want to buy property nearby or next door to one.
- After any wind farm approval, landholders excluded from initial, often secret deals, should be dealt with as any neighbour to wind farms with the proponent held to the permit conditions and breaches punished. Stakeholders should also have a right to have wind farm nuisances fairly resolved and neighbours not simply be paid off and shut up.
- Wind developments are only financially viable due to the subsidies, tax cuts and financial 'packages', grants and government support; just because the turbines and sweep paths are larger does not guarantee financial viability for the business. Turbines with larger components face larger maintenance costs. Pacific Hydro for instance lost 700 million in superfund due to its unviability.
- Politics and regulations change with public expectations and the public expects good value for money.

Wind Farm noise and vibration.

'noise levels from the Inverleigh Wind Farm are predicted to be compliant with the requirements of NZS 6808:2010' - Inverleigh Wind Farm, Town Planning Report, Hansen Partnership Pty Ltd 2

- <https://waubrafoundation.org.au/resources/thorne-r-victorian-wind-farm-review-updated-june-2014/> & <https://waubrafoundation.org.au/resources/cooper-s-acoustic-group-results-cape-bridgewater-acoustic-investigation/>

I participated in both of these studies which confirmed the adverse health and noise issues experienced in our homes at CB near a 'compliant' wind farm.

- Acoustic experts like Steven Cooper, Dr Thorne and Professor Colin Hansen say that wind turbine noise pollution guidelines do not relate to Australian conditions creating wind turbine noise and traffic noise guidelines which are inapplicable.
- Adverse and unacceptable audible and inaudible noise and vibration nuisance still impacts on neighbours inside and outside their homes and buildings.
- Energy generation complexes **have a requirement to satisfy noise criteria at all residential locations**, yet dBA measured outside is the widely accepted criteria for measuring noise levels and impacts, so any 'compliance' conditions to protect people from broadband noise and wf 'noise' and harm occurring inside homes, can never be met.
- Lower inaudible frequencies may not be audible or heard but is uncomfortably, unbearably felt, particularly by people like myself becoming hypersensitised to LFN and AM. This has many impacts on health including being highly annoying. The NZ noise standards do not protect residents from this harm.
- Noise modelling and predictions are useless as they use dBA, are based on averages, and do not indicate what will occur inside homes and the bedrooms where people spend most time. They do not reflect what is actually being experienced causing trauma to noise sensitised residents.
- For mitigation of noise impacts, use Amplitude Modulation Noise conditions similar to those imposed on RES UK's Den Brook wind farm (Vestas V90 turbines) or the UK Acoustics 2015 Amplitude Assessment or 5dBA penalty for Amplitude Modulation.
- Each turbine emits different sound powers and the impacts on neighbours vary. These differences of sound energy are not measured by averaged dBA assessments. Dr Thorne's expert opinion to the Golden Plains Hearing supported this.
- Noise Reports are deficient and like the Sonus reports for the CBWF (which were investigated during the Senate Inquiry into wf's), does not include monitoring or assessment of noise levels inside dwellings, excluding LFN, AM, or tonality occurring at lower frequencies.
- Using 2009 and 2007 noise guidelines and policies is outdated as more accurate acoustic testing has discovered the turbine signature and amplitude modulation impacts. They do not reflect what is required to protect neighbouring landowners and nearby towns from harm.
- The presence of noise issues at the Waterloo wind farm (Vestas V90 turbines) has been proven in scientific papers by Dr Kristy Hansen; and also, by Steven Cooper at many wind farms, including the CBWF in the Acoustic Study of 2015. Dr Bob Thorne and Mr Les Huson have also confirmed the presence of nuisance at CB and other sites.

- NSW guidelines have been updated and include an LFN limit and separate day and night-time noise limits which could help alleviate some of the wf noise issues. It is not enough to hope that these are effective, and precaution must be applied.
- The wind farm complaints process is flawed. I have followed all noise complaints procedures as per the Glenelg Shire permit and the noise impacts which I experience have never been appropriately managed, nor remedied. Pacific Hydro have never been penalised for the ongoing excessive noise or its impacts on us.
- If the wf is monitored, compliance with EPA wind farm guidelines 2009, cannot be relied upon to prevent adverse amenity and health impacts on nearby neighbours.
- The Senate Inquiry into wind farms 2015 and residents across Australia request Permanent Noise Monitoring Stations to be installed at wf's, and real time noise data be publicly available on-line for the life of wind energy projects. There is an obligation to meet those recommendations and this is already being done at Cotton Farm.
http://www.masenv.co.uk/~remote_data/plot.php
- Noise which is predictable and measurable cannot be ignored. I and many other people are purchasing acoustic technology to accurately measure and record the soundscape where we are being adversely sound impacted. We are using a diarised method developed during the CB Acoustic Study and both tools provide a legal chain of evidence which will help in any nuisance litigation. Professionals and decision makers allowing the harm could be and are currently being legally held to account.

Wind turbine Blade Throw, Shadow flicker and glints.

- Blade throw may be deemed insignificant by the developer but living underneath turbines in howling wind conditions, with turbines being poorly maintained and over their half-life and weird inexplicable sounds and vibrations and a chance of a blade crashing down is not acceptable. It is utterly frightening.
- Shadow flicker, glints and reflections are problematic, they intrude onto external and internal walls and windows. They extend over long distances, crossing the Cape for 2km, flickering through trees, across roads and cause a nuisance when working indoors or out. It is an unwanted physical and mental intrusion, and screening and landscaping is not enough.
- Shutting down turbines during episodes of shadow flicker has never been implemented at CB. There is no monitoring of the shadow flicker, problems reported to wind farm operators and planning departments are ignored, no-one enforces conditions specified in Planning Permits and no-one genuinely cares about the well-being of neighbours either before or after the project is up and running.
- Reflections of the CB spinning blades are visible on glass in windows, in cars, on any reflective surfaces and are intrusive and distractive as you drive in the area, work, and live your daily life.

Landscape mitigation.

- Regardless of the scenic quality and character units appointed by proponents' consultants, authorities and those supporting wind turbines for energy do not have to live inside a windfarm or with turbine intrusiveness.
- Wind farms are eyesores, stretching from horizon to horizon over vast distances. Pacific Hydro owned turbines are oil spattered, rusting monstrosities. See videoclip "your wind powered future" <https://www.youtube.com/watch?v=ipaaCHDdPt0>
- Landscape mitigation measures are usually inadequate to address the scope of impacts wf's of this size have on communities.
- Tree planting can never be tall enough to block the visual intrusion and tree planting cannot protect the population from likely turbine noise and vibration harm.
- Any vegetation screening should be sourced locally and be native to the area.
- At CB, our experience with tree planting as a visual mitigation attempt included numerous applications of weed kill to clear the areas before tree planting or seeding began. This was repeated a number of times on our (unofficially organic), land for wildlife farm and the developers process actually introduced more weeds. The property had been hand weeded for the fifteen years or so prior to the program being undertaken.
- Trees planted by Pacific Hydro are in poor condition and in no way could ever protect my family as a 'block' to turbine emissions, noise, additional noise during breakdowns or maintenance, turbines powering up and down, oil leaks and sprays from exploded gear boxes or lifting chains. And **totally fails** as a visual barrier.
- Tree planting on our property by the developer on the fence closest to the wf is spindly and has not grown properly. Other trees further from the wf, planted afterward by us and being cared for, have grown normally but block our Western views.
- The problematic CB turbines are 105m from ground to blade tip and are small by today's 200m or higher. Tree planting has failed to prevent shadow flicker, glint and glint flicker, or the visual intrusion of spinning blades onto or into our house.

Environmental Impacts on Flora and Fauna, Birds & Bats.

- 515 hectares at this proposed site will be disturbed or cleared for the transport route, wind farm and transmission lines. Of that, 206 hectares of native vegetation will be cleared. Damage to the land and habitats is occurring at all wind energy sites and is too easily permitted under the guise of 'climate emergency' and promises of mitigation.
- The land is permanently altered by the presence of windfarm infrastructure i.e., turbine foundations, crane pads, underground wiring, permanent access roads, transmission line, line access roads, substation, switching station, site huts etc.
- Wind energy projects impact on the flora and fauna. Precious old growth trees pre-dating European settlement and some trees over 100 years old face being cut down.

The unique location, elevation and overlapping of bioregions means the tallest of snow gums in existence specific to this area, are extremely rare, and cannot be replaced nor mitigated.

- Thirteen threatened terrestrial fauna species currently (safely) exist within the proposal, include Koala, Greater Glider, Spotted-tailed Quoll, Southern Myotis, Large-eared Pied Bat, Little-Pied Bat, Eastern False Pipistrelle, Eastern Coastal Free-tailed Bat, Little Bent-winged Bat, Greater broad-nosed Bat, Eastern Cave Bat, and Grey-headed flying fox.
- An additional four species identified are Booroolong Frog, Border Tick-tailed Gecko, Eastern Pygmy Possum and Squirrel Glider. Two species of Raptor at risk of turbine collision and death are, the Nankeen Kestrel and Wedge-tailed Eagles.
- The numbers of these creatures should be independently recorded and monitored pre- and post-construction for the lifetime of the project.
- Birds cannot be protected from cumulative wind turbines literally slicing, dicing, and killing them in an area covering thousands of hectares.
- Even a 500m buffer zone from a turbine will not protect Wedge-tailed Eagle nests, the eggs within, nor the fledglings. Birds do not avoid collisions and fly across vast areas in search of food. Eagles are drawn to food sourced from wildlife kills around wf's and collide with and are killed by turbines.
- Raptor biologists recommend 2 km buffer to reduce breeding disturbance and fledgling mortality. -Dr Stephen Debus, Ian Falkenberg (DEWNR)
- Disturbances due to vehicle movements, dust covering habitat and feeding areas, levelling, excavation, disturbance of topsoil, powerlines, noise from turbines, vibration, shadow flicker from turbines and alteration of habitat, create unacceptable levels of disturbance to local species.
- The level of acceptable disturbance should not be decided by the developer.
- At CB, other wf's and at this possible project; native, significant natural vegetation and habitats are being sacrificed and cannot be replaced or rehabilitated. At Cape Bridgewater, a wedge tailed eagle nesting tree was wrongfully and quietly destroyed to allow infrastructure to be erected at the same spot.
- There are no independent monitoring of bird kills at CB.

Water.

- Movement or removal of any water source or habitat will not protect birds, insects, soil biodiversity etc from harm.

- Any specialised approach by developers does not provide evidence that ground, and surface water will not be impacted or contaminated by the operations, i.e., underground cabling, concrete bases, access roads and sonic vibrations of these industrial complexes.
- Natural Springs, water tables, rainwater tank collection or any water supplies in the area should not be interfered with by blasting or likely impacts from vibrating turbines and water sources must be investigated for unusual conditions and any risks to water supply averted. Turbine spills have likely contaminated water sources at CB.
- With Australia's drought conditions any water used by the developer should be sourced outside a drought affected region and should be paid at usual rates and in full, by the developer.

Electromagnetic Radiation

- Electromagnetic Interference (EMI) impacts on television reception, radio, emergency services communications, GPS and point to point communications. No-one has come to assess the impacts after the CBWF was built.
- Acousticians at Cape Bridgewater found there was interference to noise data collections in proximity to the wind farm, this causes blank spots in noise graphs, and no data is able to be recorded during the period of interference. This also impacts on post construction noise reports and is a well-known problem which alters the outcomes and predictions, and people suffer.
- No-one actually independently monitors or proves that there are safe levels of EMR at wind energy projects, no-one guarantees our health is not impacted. I have witnessed a corona over the high voltage transmission lines at CB, loudly buzzing power poles and voltage meters being activated inside, even when all power is shut off to the house. Coronas are a fire and health hazard.
- An independent assessor should verify when EMI interferes with residents' television or radio reception and measure pre- and post-construction interference. Any conclusions should not be determined by wind energy developers. Cape Bridgewater experienced reception difficulties losing either Victorian or South Australian reception depending on the weather conditions impacting on wind farm operations, which interfered with transmissions. No-one followed up.

Roads and Traffic.

- There will be environmental impacts from a proposed bypass, a road through Crown Reserves, recreation areas, on National Estate listed Black Snake Gold Mine tunnels, entrances, archaeological remnants, and native vegetation.
- Transporting large turbine components can be hazardous.
<https://defrock.org/2020/12/08/wind-turbine-blade-truck-accident/>
<https://www.standard.net.au/story/5964103/wind-turbine-blade-being-transported-in-collision-with-power-pole/>

<https://www.abc.net.au/news/2020-08-07/wind-turbine-blades-to-cause-traffic-delays-blue-mountains/12531752>
<https://www.gizmodo.com.au/2021/01/watching-a-truck-hauling-wind-turbine-blades-kind-a-hurts-your-brain/>

- For the lifetime of the project there will be extra traffic causing roadkill, traffic noise, pollution, rubbish, cigarette butts, dust, damage, road closures, loss of access to areas, long delays on the route and great inconvenience for the farms, businesses, services, locals, visitors, and other traffic requirements in the area.
- Over the 13-month or longer construction period, this community faces coping with an extra 240 light vehicle, worker bus and truck movements per day.
- Unsealed access roads at proposed project sites often requiring quarries nearby or on-site, cause additional dust, more traffic, traffic noise, pollution, rubbish, road closures, long delays, and are a possible fire hazard in long grass on farms.
- It is my experience that disturbances to residents is longer than during windfarm construction. The intrusions and inconveniences in previously quiet rural spaces last for the lifetime of the project and continue during maintenance of the turbines and the site, at all hours of the day or night, with no notice of works to nearby residents.
- Wind development traffic may intrude on safety near rural school bus stops and impact on school bus timetables and routines.
- Roads are widened to allow easier movement for long, large vehicles, destroying roadside vegetation and creating additional expense for Councils to maintain over the lifetime of the project.
- Component transportation causes great inconvenience on the roads, at intersections, at the farm gate and causes wear and tear and increased road maintenance costs.

Emergencies and Site Hazards

- Emergencies and breakdowns occur at any time and not only within a site working hours of e.g., 7 am to 6pm; which means not only is it a long day for residents being impacted by movements at and to and from the wind farm but, disturbances will occur during the night with lights and noise and additional traffic and movements of super-sized components of the turbines etc in the area affecting sleep and normal rural night life.
- Fire Hazards. At CB and other Australian wf's turbines are not shut down on fire danger days and are not shut down during bushfires in the area. Live ash has carried on the wind, falling onto our land and the turbines on the Cape.
- A CB absentee farmer did a large burn off beneath operating turbines and its inherent chemicals, defying common sense with total disregard to the hazard. These are potential problems likely to occur at or near other wf's, causing hazard to public safety.

- Wind turbines unlike usual structures have moving combustible parts, flammable chemicals and should like other farming and industrial equipment in rural areas, be turned off on high fire days and must be shut down in the event of a fire so crews can safely get into the area to protect residents and properties.
- So-called improved access tracks are always locked at wind farms.
- Firefighters may not be insured or trained or have the required resources to fight industrial fires in a rural setting. It has been said they are not allowed within 2km of a burning turbine due to the chemicals stored on site and the chemicals within a turbine which create a risk to them.
- When wind turbines are slowed or shut down in high temperatures or high wind speed the braking system is utilised and requires an energy source, which can cause a fire hazard and additional noise and vibration.
- Aviation Hazards-The CFS acknowledges that the presence of wind turbines can impede aerial firefighting activities, particularly in low cloud conditions, in smoke haze or at night-time.
- CASA may require turbine lighting that includes two red flashing lights per turbine, causing an eyesore, effecting night-time landscapes and habitats.
- Turbines cannot be sited where they will inhibit the use of aerial agricultural spraying and fire, water bombing on neighbouring farming properties.
- Wind turbine impacts on flight must not be compared to impacts of tall structures such as buildings or trees, especially when industrial turbines are close together and with today's wider blade sweep paths, the turbulence is unpredictable.
- Wind turbines are not highly visible at night, in fog or rainy conditions.
- When there are on-site spills or other emergencies, the electricity generator must notify the EPA and/or other relevant health and safety bodies; and be monitored to ensure decontamination etc is properly done. The on-site incident/complaints form, and the complaints register, including about noise etc should be readily publicly available for scrutiny.
- Wind turbine or energy generators passing the buck or responsibility onto Contractors etc. is unacceptable, the owner operator should ultimately be held to account and take responsibility for hazards caused. And incidents should become public knowledge.
- Lightning strikes at wind farms create potential hazards. At Cape Bridgewater lightning struck a turbine, hit the ground, and moved rapidly from tower to tower near the ground surface.

- As the tallest moving point in agricultural areas, turbines attract lightning strikes which can split blades and start fires, showing the lightning has not been safely grounded.

Aboriginal Communities

- Developers possibly work with Aboriginal Communities to avoid sensitive locations and address impacts but at Cape Bridgewater the developer was responsible for causing harmful community division. One of the local Koori groups was paid money, the community was divided to the extent of a member of one group being run out of town and threatened. (reported in the media & federal Senate). The CB development impacted on known and protected middens located on the Great South West Walk and cliffs.

Heritage

- This area has an historical value that must be protected from turbine acoustic and visual impacts.
- The CB wind farm was developed regardless of, a heritage overlay, and high scenic coastal values, where our homes and properties are some of the oldest in this birthplace of Victoria.

Decommissioning

- Decommissioning should involve the complete removal of all concrete and wiring and not just covered by topsoil.
- The developer should be made by law to set aside funding for decommissioning and rehabilitation from the start of the project.
- Renewable energy projects should not be commissioned, recommissioned, or added to without further community consultation, input and review by a planning body and independent assessors.

Concluding comments.

Wind farm developers must accept that individuals, the public and community groups have a democratic and moral right to give feedback or evidence to oppose any large-scale development and have that input reasonably accepted and utilised.

Supporting any strategic plan to think globally while developing renewable energy is questionable while so many countries around the world cannot afford the associated cost of renewable energy and are investing in coal fired energy which is cheaper and provides cheaper electricity and simpler infrastructure.

There is no guarantee this project will meet its projections to provide reliable energy nor will it provide cheaper electricity for Australian households or businesses. Any excess energy sent interstate will be done so at additional expense to consumers. Consumers are fed up with outrageous electricity bills and many are being disconnected from the grid because they cannot afford the bill.

Due to exorbitant costs, there is political uncertainty around renewable energy. A moratorium should be placed on the construction of further wind farm developments until the many protective

recommendations of the Senate Inquiries into wind farms and of the Waubra Foundation have been adopted. There are two NHMRA funded studies into health and windfarms underway and more investigations are required before wind turbines are deemed safe.

There are cumulative impacts with adjoining wind farms and with wind turbine noise and vibration being detected over vaster distances. Whilst these cumulative impacts are becoming more researched and understood by independent acousticians, those like myself who are sensitised by these industrial sourced noise frequencies are being further adversely impacted and our health deteriorates.

With direct experiences and knowledge of living close to a wind farm and other sources of LFN I have a moral obligation to object to wind farm developments while wind farm problems stay buried. After 10 years living with the wf we have been forced to abandon our home for medical reasons despite all attempts to avoid having to do so by seeking resolution for the problems we experience at CB.

Problems of wf noise, vibrations and unwanted sensations impacting my families' health and well-being and our amenity and problems have never been resolved.

The co-operative acoustic study undertaken in our home by Pacific Hydro, Steven Cooper and the participating families cannot be ignored or dismissed by regulating authorities responsible for protecting communities from harm. This study is not alone in discovering the presence of a wind turbine signature or amplitude modulation at an infrasonic rate which confirm 'noise' and vibration problems exist. Wind farm operations have a link with sensations causing more distress and health impacts than at other times of operation. The major impact being sleep disturbance.

Mr Cooper presented a paper to the American Society of Acousticians in New Orleans, on a study which he conducted in his reverberation chamber, participants were exposed to wf sounds which we were not aware of in the silence of the chamber. We involuntarily physically reacted in various ways to those unheard sounds. I spoke at this conference of my personal adverse experiences living near a wind farm.

The unbearable conditions since the wf was constructed in 2008 have forced my family to close the door while we continue to pay the mortgage on our devaluing land and virtually unsellable property. We reside between the two homes at added personal expense and distress while we have sought and failed to achieve a resolution to our unacceptable situation.

Negotiations arranged by the NWFC failed and so has the complaints process. Pacific Hydro has not altered operations at its wf to protect the neighbours from intrusive noise, vibration, and sensation. Without appropriate changes to this industry, others and other communities may suffer.

Wind energy generation has not proven to be a safe or effective energy technology and while people including elders, children or disabled are being health impacted, large scale renewable energy projects are likely to cause infliction of further pain, hardship and major impacts on other rural residents and rural families and to allow this is showing deliberate and wilful blindness to the known facts. Authentic steps are required to protect people from industrial harm.

Research must be independently undertaken in the homes of the impacted and with input from those of us who are the real-life experts. South Australia has set the example of the ineffectiveness and out of control high cost of renewables as an energy source and Victoria follows the same pattern.

Cape Bridgewater is an on-going example of impacts of a wf on heritage, cultural and tourist values, and on the homes and lives being impacted on and lifestyles desecrated. The intermittency and expense of wind, solar and their back-up systems along with ruining local environments makes the push for more renewables and the building of more turbines unacceptable and fails a duty of care to the general public particularly those of us being directly adversely impacted by wf's.

Fix the technical and economic problems first.

Our experiences and contribution to informing others about a health affected life near a wind farm should not only be filed away; or scrutinised by developers, who over years of such submissions, have fixed the minor nuisances to garner some kind of social licence to operate, and not fixed the (wind turbine annoyance) elephant in the room.

The annoyance and noise, vibration, and sensation impact on residents at Australian wind energy projects are not acceptable. The World Health Organisation defines health as a state of complete physical, mental, and social well-being, not just the absence of disease. (WHO 1947)

There is an obligation to recognise that poor health and annoyance near wind energy projects are not ignored as shown by the AAT ruling and recognition that '*WTN is complex, highly variable and has unique characteristics.*' Also recognised by the NHMRC.

Please represent the people who are being impacted already or likely to be adversely impacted by wind energy projects by recognising peoples basic right to good health and rights to live peacefully and safely in our own homes. Support those of us saying '*enough is enough*'.

Yours Sincerely,

Melissa Ware