I moved to Nundle over twenty years ago based largely on the natural advantages it possessed. Mostly that was about the natural beauty conferred on the town by the dominant eastern mountain range and the softer western hills that enclosed it in it's own small river valley. It's geography, cool climate and high rainfall set it apart from the plains districts to the west including the regional city of Tamworth.

Other criteria were its distance from the major urban centres, which we hoped would protect it from hostile development, the outstanding main street, and the fact that you had to 'go' to Nundle. It was not on an arterial highway, and it was on the way to nowhere. Importantly there was the sense that the place had 'something'; that 'thing' that eludes quantifiers.

The sense of that 'thing' is constantly brought up by visitors, as is the feeling that they have stumbled into a well-kept secret. What makes up that set of ingredients has until now been of small interest, but it certainly includes everything above plus whatever magic qualities that are difficult to measure. In the end it's probably mostly about respite. Respite from most of whatever human confected mess makes up the environment of the average Australian urban dweller.

In the early days of our retail business, gross takings on an average weekend day would be approximately 5-10% of where they currently stand. A concerted twenty-year effort of chipping the business's and the town's name into the public consciousness through both individual and communal efforts has tapped that ineffable 'magic' without radically altering the character of the place or the valley. There has been a steady and patient increase in the town's commercial fortunes over those twenty years. Importantly they have been organic, driven largely by committed and innovative individuals living and working in the area.

Trading largely on what 'is' rather than trading in the hustle of 'what could be' those entrepreneurial efforts of recent years are perfectly scaled to the place. They coexist easily with other local industry. That this was a desirable approach was shattered at an early informal community meeting when the major landholder/host/proponent stated that in his time in Nundle 'nothing' had happened. In contrast, we could point to millions of dollars of commercial growth in that time, both direct and indirect. It is and was invisible to a particular mindset. The gigantism of a wind energy development strung out along 24kms of mountain is 'something'.

That twenty-year experience makes you suspicious of the rural salvation narratives that plays well with certain audiences, particularly urban. They range from the condescending to the aggressive, from charity case to 'you should be grateful', and it fits perfectly with the designs of developers of all stripes. Renewable energy developers are doubly blessed with salvation stories. Poor rural communities and planets/civilizations.

The Hills of Gold Wind Farm proposal was seemingly conceived on the assumption that the residents of Nundle and Hanging Rock were waiting for

something 'big' to come along and deliver an economic model closer in character to the lower Hunter Valley. A straight numbers game. Resource extraction. It ignored the fact that many people in the area had foregone the comforts, conveniences and promises of that economic model to live in a place that was uniquely beautiful; socially, climatically and geographically. This includes larger landholders who had added up the usual agricultural resource factors but decided on the area for reasons beyond those simple criteria.

Throughout the EIS there is the constant implication that opposition to the project would cease if only the correct information was absorbed. It ignores the possibility that the development model itself is irreconcilable with the values that brought many people to the area and holds them here; that it is not a perception problem. That the measure of the place is not what it materially delivers now, or in whatever conception of the future the developer is selling. Further, the future that is being sold doesn't seem to have any precedents in relation to similar small rural townships.

Reading the Socio-Economic section of the EIS (SGS) and noting the experiences of Taralga, Hallett and Mt Bryan is to get a taste of what Nundle and Hanging Rock can expect. In an SKM report for AGL on the Hallet Wind Farms, which lauded the benefits for more distant regional centres, it is stated:

"However, it is unknown how much of the resulting economic benefit was realised in the communities of Hallett and Mount Bryan (who were the most directly affected). It is possible that their small size inhibited them from capturing the majority of benefits, with greater numbers of service/accommodation providers in larger centres nearby. "

It is probably fair to assume by the lack of measurements that it was not much, and it is probably fair to assume in the case of this proposal that most economic benefits will flow to Tamworth and beyond. Traffic assessment for the construction phase assumes the workforce is coming from beyond Nundle/Hanging Rock.

The SGS summary states:

- Wind farms can create employment. However, the number of jobs is variable dependent on the stage of the development (construction versus operation) and the need for certain skillsets (such as wind turbine technicians) that may not be present in the local region (for example, manufacturing of parts overseas). Indirect employment benefits can also accrue to local businesses who support the workers, although this depends on the ability of the closest town to be able to support the workforce. Benefits may drift to the closest major town instead.

Throughout the process Nundle/Hanging Rock has been sold the line that there will be a jobs bonanza during construction and O&M whereas the experience of towns of similar size has been the contrary. Without even questioning the developer's job numbers, 'benefit drift' can be assumed to be the order of the

day. Those most impacted by the development will derive the least economic benefit.

Recent travels along the west coast of Ireland anecdotally bear this out. Wind developments are rising up all over the coastal hinterland but there is no evidence that the small villages in their shadow have any capacity to leverage them as attractions, nor do the developments have any capacity to arrest the larger economic forces in play. Land consolidation and economic/service centralisation that creates population drift to Dublin, Galway and Limerick. They simply do not create enough static employment. Down on the coast itself, towns and villages remain relatively strong because of their proximity to more obvious attractions and infusions of tourist dollars.

High levels of labour productivity in the wind industry in the O&M phase suggest that not only is the figure of 31 onsite workers inflated, a brief search of the internet reveals numerous industry specialist contractors vying for business. Their mobility is sold as one of their strengths and belies the developer's talk of a large, locally (Nundle/Hanging Rock) based workforce. It understandably appeals to older residents who remember large teams of Shire Council outdoor staff and Forestry workers. Current local employment by these two organisations probably gives a better idea. Small local workforce plus centrally (Tamworth) located specialists, plus contractors, mostly from away. In spite of large amounts of electricity, telecommunications and water infrastructure in the Nundle/Hanging Rock area local industry employment would be close to zero, (excluding Chaffey Dam manager). An expanded sustainable timber industry with local milling would be a far better option for Nundle/Hanging Rock both in economic terms and as a contribution to renewable resources.

Throughout the Socio-Economic section of the EIS the tendency is to speak of 'regional' benefits that from the perspective of someone living outside the regions appears reasonable. But, conflating the needs and possibilities of a Nundle/Hanging Rock with Tamworth or even Newcastle lacks nuance and particularity, and obscures the centralising tendency of big industries. The SGS report generally equivocates when it comes to Nundle/Hanging Rock's place in the economic flow. When questioned on the subject on a couple of occasions, Jamie Chivers of Someva was similarly equivocal. Big 'regional' capital expenditure reads well and looks good to politicians and urban populations. That very little of it will fall at the point of impact of this project will unfortunately be overlooked.

If the proposal is approved and built, with little local employment, and Nundle suffers declining visitor numbers (and new residents) due to loss of appeal and loss of operators, and land consolidation and absentee ownership continue to grow, then there is the real risk it will begin to reap a net economic loss from the project. Public project expenditure cannot paper over declining commercial fortunes.

Tourism

The attached photo shows an example of the kind of buzz wind turbines generate for tourists. The turbine (with internal viewing platform) is located on top of the peak that forms the Grouse Mountain Ski Resort. The resort is located approximately 20 minutes from the Vancouver CBD with sweeping views across the city, Pacific Ocean and coastal range. On this particular autumn day the mountain would have had 1000+ visitors enjoying various off-season activities including wood chopping displays, chair lifts, Grizzly displays, hiking etc. There were no takers for turbine tours. The employees at the banner-draped desk were underutilised. A population of 2.6 million people within an hour's drive, and nothing.

Recent travel throughout the UK and Ireland revealed no obvious promotion of activities related to wind facilities. They were ubiquitous, ad hoc, and showed no coordinated planning, particularly early developments. There was a moratorium

on onshore developments in place at the time as opposition to further expansion grew.

What was obvious was that wind developments had been kept out of areas of recognised natural beauty, with high visitor numbers. The worst developments were those that encroached on landscapes shared with National Parks and areas of outstanding natural beauty. Mid-Wales and the Scottish Highlands had various examples. The least offensive developments were those located at the point of consumption, in areas already subject to intense human activity. South Wales, North Wales, Merseyside and the Clyde Valley in Scotland are examples.

The literature review within the SGS Socio-Economic report does not make a compelling case for wind tourism:

1"A 2015 German study sought to build on a number of existing studies that used empirical evidence (interviews) to understand the relationship between wind turbines and tourism in Germany. The 2015 study utilised secondary data sources (such as regional tourism activities, tourist arrivals, accommodation facilities).

Findings reiterated what the earlier German studies had suggested: that the construction of wind turbines had a negative relationship with tourism demand in German municipalities, particularly those inland. "

2"Resident perceptions and attitudes towards the wind farms, and their perception of the impact of the wind farms on tourism, were divergent. Most residents agreed that the wind farms had no impact on local heritage preservation. However, they were critical of the contrast the wind farms created in the surrounding landscape and they had a negative view of its impact on the tourism experience. " Sortelha, Portugal

The Scottish study conclusions are described as mixed but some findings stand out.

- "Most sensitive natural locations generally do not receive development approval, and therefore, show little evidence of negative effect. "
- Wind farms were observed as being tourist attractions, but visits tend(sic) are not frequent and are an 'unusual occurrence'.
- An Internet study was also conducted that sought to determine the proportionate drop in prices paid for accommodation if a view from a hotel gained a view of a wind farm. Six hundred tourists from the UK and US were canvassed. The presence of a wind farm from the hotel resulted in a steep decline in value.

The more positive takes on wind developments come from a favourable attitude to the 'idea' of wind. This is noticeable in the younger demographic. The second finding quoted above raises the suspicion that no matter what the attitude, how people actually behave can be quite different. It is difficult to state in the current

climate that you would have no interest in visiting an area hosting wind farms or that you think they generally detract from a place. All sorts of negative character traits could be imputed. Where you then actually spend your travel dollar is entirely your business however, and the attractions of nature, history/heritage, vista/landscapes will continue to trump modern industry whatever its carbon credentials.

Stating that the presence of wind farms in Scotland would not influence future visits to Scotland is a bit geographically vague. We can assume people will continue to visit Australia in spite of the presence of wind farms in Australia.

There is no doubt that there is a tolerance in passing of wind facilities. Transiting past developments and actively seeking them out, or confronting them at a destination, are entirely different things. Turbines were not used as selling points for any town, accommodation, activity, or region visited in the UK or Ireland. The lack of interest (in spite of goodwill), even at this novelty stage of wind energy, suggests a limited scope and life for wind tourism.

Visual

The fundamental assumption of the visual assessment is that the proposal (and any wind farm) is experienced individually, at precise places near homes, and in narrow angular slices. It's a static approach that ends up in the shallow concept of 'views' and mitigation with shrubs. It's not very good at the broader collective experience or place-based impacts. By slicing it all up and quantifying the results and producing washed out montages it can avoid the way a project, badly sited, will define a much larger area and the townships within it.

This project will define Nundle. Not the mountains, not the hills or the Hanging Rock but the steel towers on top of them. It will aesthetically **own** the Upper Peel Valley.

Every promotional photo and video of wind energy, even this developer's, show turbines in soft, rolling, open country that bears absolutely no resemblance to this particular landscape. Visual thresholds of 3100-4550m are inadequate to the task of visually explaining a project with turbines rising 230m to blade tip, placed on ridgelines that rise 600-800 metres off the valley floor. Talk of shrubs in the face of a 24km long ridge of turbines, mostly linearly placed, requires specialist obfuscation, and the wilful misunderstanding that the mountains are some sort of an accidental backdrop, rather than the defining element for a whole valley.

The distance of 8km from the town of Nundle is often quoted to imply a considerable remove from the project area., but on approach from Tamworth/Wallabadah the steep rise of the mountain collapses the distance significantly, and qualitatively the northern end of the project is 'right there.'

The shape of the ridge forms an approximate 90 degree visual arc. The dramatic uplift of the mountains off the valley floor, and the extended linear layout of the

turbines has got to make this project one of the worst for visual impact. The National Wind Farm Commissioner's considerable reservations about ridge-top developments (also the Upper Hunter Council's Development Control Plan for Wind; "Ridgeline's dominated with wind turbines will not be favoured") are writ large here as an example of how not to site a wind project.

The addition of aviation lighting, quite apart from the developer's assertion, seems inevitable given current CASA policy. Unfortunately the requirement for AHL is made as a condition of consent, allowing the developer to downplay or forget that 35+ blinking red lights standing between 730m and 930m above the valley floor are a near certainty. It is uncertain whether light pollution from the seething metropolis of Nundle will obscure them.

In 11.3.11 Cumulative Impacts the EIS states the following;

1. Due to distance there are no opportunities to view any additional wind farms simultaneously from a static viewpoint in the foreseeable future. Further, the Project is set back from major travel routes, which prevents any opportunities to view wind farms in succession along travel routes.

As mentioned above, Nundle/Hanging Rock's greatest strength as a destination and as a place to live, is that it is 'set back from major travel routes'. It should also be noted, as already stated above that wind-farms viewed at 100kmh, from inside a vehicle, on the way to somewhere else, are the least offensive developments. It is an odd justification.

Also in 11.3.11 Cumulative Impacts:

1. The New South Wales Government have identified three key Renewable Energy Zones (REZ) in the State's Central-West Orana, New England and South-West regions. These zones are still in the early stages of planning and the zone boundaries are yet to be finalised. However, publicly available indicative location maps show that the New England REZ is located in close proximity but outside the Project Area. This confirms the suitability of the broader region for wind farm projects and also gives rise to the possibility that further wind farms will be developed in the region in the future. As the Project is located approximately 60 km south west of the indicative New England REZ it is considered unlikely that the perceptions of the regions' broad landscape character would be altered as a result of the Project.

The New England REZ is a belated attempt to contain the cumulative visual impacts of wind developments to the New England Tablelands. The EIS on a number of occasions, optimistically drags Nundle/Hanging Rock 60km north onto the Tablelands. Nundle/Hanging Rock is not part of the NEREZ either on paper, or geographically and culturally. Residents and visitors to the New England Tablelands will be at similar heights to any wind developments, in open, highly modified, rolling country. They don't live at the base of the escarpment looking up at turbines. Covering the New England from Glen Innes to Nowendoc

in wind developments is equally an argument NOT to extend the cumulative impacts onto the North West Slopes.

On a final note it would be good if in future reports the authors of the SGS report, refrained from the following (quoted from the Visual Amenity section under Community Engagement pg15):

- *Visual amenity:* Three respondents suggested that the proposal has had a material impact on wellbeing for some members of the community, especially people who have come to live in Nundle to enjoy natural amenity. Two respondents felt the wind farm was 'industrialising' the natural landscape. In contrast, two respondents felt the wind farm represented progress. Two respondents were awaiting clarification on the final layout of the construction site.

If the concept of 'industrialising' was worthy of sceptical scare quotes, then so too was the lazy reference to the concept of 'progress'.

Community Support

Section 4.4.7 of the EIS notes considerable support for the project using the number of supporting signs algorithm. There is at no time any acknowledgement of the widespread opposition that appeared immediately after the proposal was made public, and that has in no way resiled from its position.

The supportive signs were purchased and distributed by the major landholder/turbine host in the second half of 2020. 'I'm a Big Fan" signs are a generic sign distributed free of charge by the Australian Wind Alliance. As far as I understand many residents were approached directly at home to display signs of support. This is an entirely different social dynamic to the opposition group. Rather than actively expressing, at your own financial cost, a contrary view, it relies on the embarrassment and intimidation of refusing, face to face, a member of the major landholder's family. That's no small thing in a tiny community.

The fact that the late appearance of the signs coincides with the final phase of the preparation of the EIS, and then their inclusion as evidence of support, smacks of corporate PR rather than a grass roots groundswell. Hills of Gold Preservation Inc. signs, bought and paid for by members, have been in place since early 2018, so long in fact, that many have been replaced numerous times due to weathering. The use of sign counts as a measure of support in a supposedly serious EIS document is laughable.

More telling is the lack of take up of Neighbour Benefit Sharing Agreements inside the 5km zone. Outside of host properties there are a total of 8 Associated Dwellings, which represents a small fraction of eligible properties. In spite of a lot of talk about the inevitability of the project, and talk of approval already having been granted, residents have held out.

Environment

The major landholder/turbine host has publicly stated, in the media and meetings, that the idea for a wind farm on the range occurred as early as 2008/2010. It varies. It is understood that met masts were in place as early as 2010. From around that time ongoing purchases of agriculturally marginal blocks that encompassed the top of the main range were made. As an established earthmoving contractor with ready access to heavy machinery he was then able to go about creating what looks, in retrospect, like a green-field site for a wind farm.

The biodiversity, ecological, site suitability requirements etc. for the EIS have largely been conducted after this time. 'Historical' clearing is noted in the EIS, but it must compromise any conclusions reached in the various studies. In addition, the 2019/20 drought and bushfires too, must have seriously affected biodiversity studies, and it is difficult to believe that the general public will stomach further clearing of koala habitat, of any extent.

The siting process, documented in 5.5 of the EIS, carefully notes the initial numbers of arbitrarily placed turbines that varied from 78 to 97. These are like ambit claims, based on little ground knowledge, but reductions are always presented as responses to community concerns, vegetation and biodiversity issues. The process, which so diligently ignores any prior clearing, is then seen to carefully move poorly placed wind components/laydowns etc. in order to protect whatever extant vegetation there is.

It also requires suspension of any initial concern that placing a large industrial zone on top of the main range of the Great Dividing Range at the junction of the Mt Royal and Liverpool Ranges, immediately adjacent to a high conservation value Nature Reserve and National Park might be a poor idea. The already fragmented Liverpool Ranges will be subjected to more fragmentation as the spine of the range is cleared and built out. A mountain of ecological quantifying data fails to obscure the unquantifiable idea that wild places suffer serious qualitative losses in the presence of large-scale industrial development. That interface between human activity and the other than human deserves a lot better than an 80m setback before the power station starts.

The project also begs the question that if we are convinced of the effects of climate change, then surely, cool, high altitude, high rainfall, ecological communities will become of even greater ecological importance, and thus deserve a kind of anticipatory consideration beyond the particular set of circumstances prevailing between November 2018 and August 2020. The precautionary principle contained in the Ecologically Sustainable Development guidelines (EIS 22.1) could apply here. Lack of scientific certainty over environmental conditions in fifty or 100 years shouldn't prevent action now to prevent destruction or compromise of ecological communities set to grow in importance (water capture, transpiration, biodiversity etc.) in coming years.

Climate catastrophe is currently deployed to justify virtually any renewable electricity project, but the ecology of the point at which they touch the earth could, in an uncertain future, outweigh their capacity to keep the lights on.

There is at the moment no precedent in NSW for siting a wind development at such height, amongst such an ecological community, at such close proximity to Nature Reserves/National Parks, and so close to communities with a proven history of leveraging their location, landscape and beauty to attract visitors and new residents alike. Let that combination of elemental strengths determine the future of Nundle/Hanging Rock, rather than reducing the place to an average wind-speed, and whatever *might* proceed from that.