I object to the development project SSD 9679 "Hills of Gold Wind Farm" consisting of 70 wind turbines in the Nundle and Hanging Rock district of Northern New South Wales.

I propose a number of questions and tasks for the proponent that require a response:

#### **DECOMMISSIONING RISK:**

Environmental Impact Statement (EIS) lodged by Wind Energy Partners has failed to consider the significant risk or provide any cost analysis for the decommissioning phase of the wind farm development. The proponent is willing to actively promote immediate benefits in terms of jobs, funds for community enhancement projects and development costs benefits to the region however no monetary considerations have been made for the future expense for the decommissioning phase of the project.

Under a project lifespan of 25 years the appropriation of funds for decommissioning commences in year 16 (Confirmed in a meeting at the Nundle information centre with Jamie Chivers of Wind energy Partners in February 2018). Therefore the project has considerable decommissioning risk to the local community and environment with no funding from years 1-15. Given the high number of renewable energy projects presently under consideration, the forecasted reduction of Federal subsidies and the very high budgetary cost per MW of the Hills of Gold Wind Farm, which all contribute to declining investment returns all which contribute greatly to the decommissioning risk of the project. Decommissioning risk is considered very **HIGH**.

The project owner is Engie, a foreign owned International Company with multiple taxation jurisdictions and company investment structures which provide limited legal liability in Australia upon default. This additional decommissioning risk should be avoided through the implementation of a **Wind Farm Decommissioning Bond** and fully funded cost analysis and implementation plan presented.

# 1: Under the NSW Wind Farm guidelines please explain why a fully funded cost analysis and implementation plan was not presented and when will it be provided?

#### IMPACT UPON LAND VALUES:

Reports provided by Wind Farm Developers regarding agricultural property land values mostly conclude little valuation changes in the property asset value of land host holders and adjoining agricultural properties. There is limited reduction to agricultural production in most wind farm developments therefore it is easily to assume little change to valuations. However these reports presented and commissioned by Wind Farm Developers fail to consider ongoing decommissioning risk upon project lifespan maturity and greater property capital gains that could have been achieved without wind farm developments within close proximity.

The financial impact on valuations upon rural lifestyle blocks is considerable and not addressed in the EIS. There are 43 listed non associated dwellings within 4550m of the project, additionally multiple dwellings including village residents outside the 4550m radius that are also heavily impacted due to prominence of the ridgeline and turbine heights. Small rural holdings with limited agricultural production and lifestyle holdings that will experience significant financial loss and reduction of rural amenities of visual, noise and landscape settings. Lifestyle properties are purchased for the rural landscape views and settings and no mitigation methods will reduce the impact from the "Hills of Gold Wind Farm" development. Top blade tip height of 1646 meters (13.1.3 Assessment of impacts), shadow flicker and flashing aviation lighting cannot be avoided in this location and tree screening mitigation measures are ridiculous solutions.

Landholder agreements presented by Wind Energy Partners state "the landholder: acknowledges and accepts the construction and operation of the Hills of Gold Wind Farm in proximity to the property, including any **visual impacts**, including **shadow flicker**, and **noise impacts** which may result." This contractual agreement illustrates areas of impact upon lifestyle properties that represent serious implications for any future sale and the capital value of the asset creating serious equity and distributional issues surrounding this project. *In particular, a large part of the cost of the project is likely to be disproportionately borne by those neighboring the wind farm sites.* 

Case Study: Property NAD 75 (7854 meters form the nearest turbine) was placed on the market over the winter and spring periods of 2020 for a 12 week campaign. Campaign received over 120 enquires from Australian and International buyers who expressed interest however disclosure of the "Hills of Gold Wind Farm" resulted in limited final expressions of interest. Multiple buyers expressed interest at the vendor asking price without the wind farm development approval however if the project proceeded offers where 25% below market price.

2: The presented case study of the property value above is in stark contrast to the EIS and property value reports, what is the proponent's response? I request an independent study to be conducted on the effects of wind farms on valuations of small rural holdings and lifestyle properties for review? Study to include local property agent's analysis from Nundle and Hanging Rock, additionally information of sales in other fully developed wind farm locations.

### COMMUNITY CONSULTATION & OPPOSITION:

Yes Wind Energy Partners have actively engaged the major land host holder (53 Turbines) and supporters of "Friends of the Wind Farm" but the vast majority of the Nundle and Hanging Rock communities and its concerns have been totally ignored and dismissed. All references to community engagement lodged in the EIS after March 2018 refer to engagement with members of "Friends of the Wind Farm" and financial project beneficiaries.

The Hills of Gold Preservation Group lodged with NSW State Parliament a petition objecting to the development of the Wind Farm in the district, verified by a Justice of the Peace with 310 signatures from local residents residing in the districts of Nundle and Hanging Rock.

2019 Electoral numbers for Nundle & Hanging Rock district	447
2021 local petition signatures objecting to "Hills of Gold Wind Farm"	324
Local resident % of the community objecting to this project	72.5%

Nundle and Hanging Rock community objection to this project is **EXTREMELY HIGH**.

The original 97-turbine project presented in the Nundle community hall in March 2018 consisted of a desktop analysis based upon the available space along the ridgeline. This analysis **deliberately included landholders not participating in the project** therefore artificially distorting the original project turbine size and misleading the consultation process by stating adjustment of turbine numbers (97 to 70) was based upon community and environmental concerns.

The table presented below shows the 23 listed non-associated dwellings within 3100 meters of the project. Desktop assessment for 11 dwellings (48%) highlights limited consultation and engagement with properties owners heavily visually impacted by the project.

Black Line)			
D	Location	Distance to	Desktop/Site
		nearest WTG	Assessment
NAD_01	Mountain View Road	2.58 km	Desktop
NAD_4A	Shearers Road	2.79 km	Site
NAD_4B	Shearers Road	2.89 km	Site
NAD_4C	Shearers Road	2.66 km	Site
NAD_5	Nundle Creek Road	1.79 km	Site
NAD_7	Morrisons Gap Road	1.74 km	Desktop
NAD_8	Morrisons Gap Road	1.16 km	Desktop
NAD_10	Nundle Creek Road	2.27 km	Desktop
NAD_10A	Nundle Creek Road	1.93 km	Desktop
NAD_11	Morrisons Gap Road	1.05 km	Desktop
NAD_12	Morrisons Gap Road	1.38 km	Site
AD_12	Morrisons Gap Road	1.79 km	Site
AD_14	Morrisons Gap Road	1.94 km	Site
NAD_15	Morrisons Gap Road	2.08 km	Site
NAD_16	Morrisons Gap Road	2.20 km	Desktop
NAD_17	Nundle Creek Road	2.94 km	Desktop
NAD_18	Morrisons Gap Road	2.69 km	Site
NAD_19	Morrisons Gap Road	2.93 km	Desktop
NAD_20	Morrisons Gap Road	3.05 km	Desktop
AD_23	Morrisons Gap Road	2.52 km	Site
NAD_67	Morrisons Gap Road	1.45 km	Desktop
NAD_69	Mountain View Road	3.10 km	Site
Potential DA	Locations:		
NAD_24*	Morrisons Gap Road	2.06 km	Site

- 3: Please explain how a desktop assessment for a visual effect rating for a dwelling can be supplied without an inspection of the property? How accurate is the data?
- 4: Please explain why 48% of the dwellings within 3100m of the project received desktop assessment for visual effect ratings? And why this should be considered effective consultation?
- 5: Please explain why all visual mitigation measures recommends tree planting and how are trees going to screen turbines 230 m in the air from multiple locations of the property?
- 6: Please explain why multiple residents have not received photomontages when requested?
- 7: What is the proponent's response to 72.5% of the community not supporting the project? Why is the petition, which has been well documented within the community and local media sources not mentioned in the EIS?
- 8: Please explain why no consultation process has been conducted with "Hills of Gold Preservation Group" the largest organization in the district? Why is there no mention of the group in the EIS?
- 9: I reject the statement the number of turbines reduced from 97 to 70 was based upon community and environmental concerns but was solely based upon overstated non-associated landholders within the project corridor and terrain constraints.

#### **Turbine location & removal:**

"WEP has entered into lease agreements with 14 landholders hosting project infrastructure, including the transmission line and switching station (encompassing 64 individual lots)" although correct given land title ownership further analysis provided by local knowledge, adjoining property owners and RP Data concludes through various holding entities **one family will host 53 of the 70 turbines** additionally another family 13 turbines.

Entity 1: Includes one family landowner of properties 6, 7, 8 & 10 hosting **53 Turbines**:

3,4,5,7,8,10,11,12,13,14,15,16,17,18,19,21,22,35,36,37,38,39,40,41,42,43,44,45,46,47,48 49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70.

Entity 2: Includes landowner of property 11 hosting **13 Turbines**:

20,23,24,25,26,27,28,29,30,31,32,33,34.

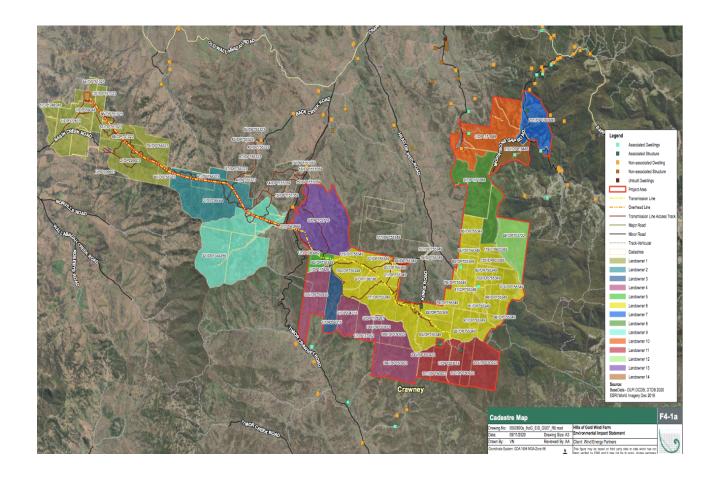
Entity 3,4 & 5: Includes 3 landowners of properties 3,4,5 & 13 hosting total of **4 Turbines**:

1,2,6,9.

Entity 5,6 & 7: Includes 3 landowners of properties 1,2 & 9 **hosting transmission lines**.

Entity 7 & 8: Includes 2 landowners of properties 12 & 14 have no association with the project.

The overwhelming financial gain of the project is concentrated within two family entities, with the community, village, surrounding lifestyle properties and small agricultural holdings bearing the costs of the project.

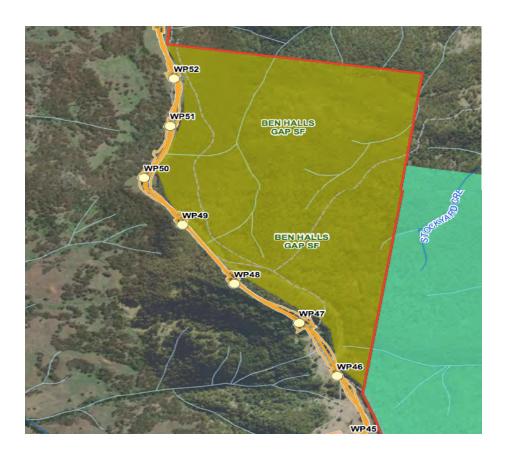


"The Project Area also includes one Crown land allotment under perpetual lease, forming Ben Halls Gap State Forest. Consultation has occurred with NSW Forestry Corporation who is responsible for managing the Ben Halls Gap State Forest currently under a perpetual lease. An agreement is in place with the leaseholder and advice from Forestry Corporation of NSW (Forestry Corporation) has been received that this lease is allowed. The lease will require final sign-off from Forestry Corporation upon final design for registration of the lease." The agreement is not with the landholder only the leaseholder therefore not valid, landholder 12 should not be included in the hosting project infrastructure.

As no agreement exists with landholder 12, turbine placements on the boundary are not within acceptable distances from non-host property boundary (i.e. 460 meters). "Turbines shall not be located within a distance two times the height of the turbine (including the tip of the blade) from a non-related property boundary" quoted from the guidelines of the Upper Lachlan Development Control Plan 2010 for Wind Farms and the Upper Hunter Development control Plan 2015 for Wind Farms. Additionally Turbine placement 10-60 meter proximity to a State Forest is not acceptable for biodiversity and bushfire issues.

Turbine placement of WP 46,47,48,49,50,51,52 need to be extended to 460 meters from the Ben Hall's State Forest boundary therefore locating turbines on a >30% gradient and non compliant with turbine development guidelines.

## A total of 7 turbines require immediate removal from the project design.

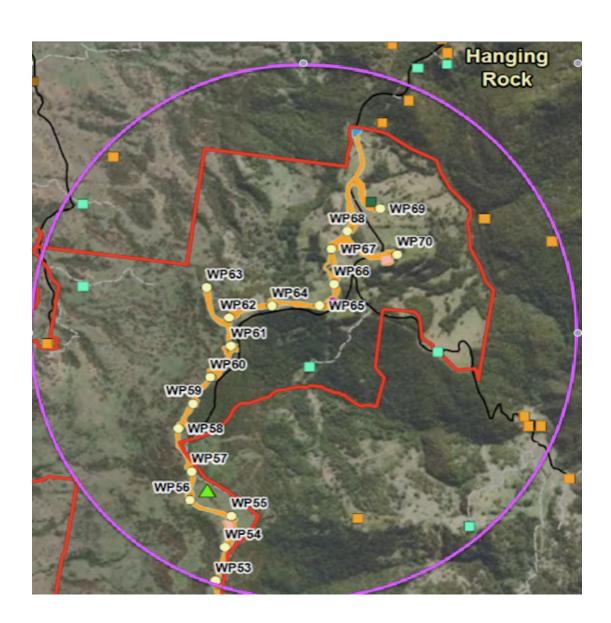


Positioned on the Northern end of the Hanging Rock turbine placement design, the immediate turbine removal is required based upon distance to 21 non-associated residences. All 21 non-associated residences are lifestyle properties with little consultation and **10 dwellings having desktop analysis** for visual assessment.

Turbine numbers WP 61,62,63,64,65,66,67,68,69,70 are all situated under the required distance of 3100 meters from multiple non–associated dwellings that have no benefit sharing agreements with the project.

Turbine numbers WP 53,54,55,56,57,58,59,60 are all situated within 1 km of the presently under construction non-associated residence located near WP57 in the map below. This non-associated dwelling located near WP57 is not even registered on the map for assessment.

# A total of 18 turbines require immediate removal from the project design.



**Ben Halls Gap Nature Reserve is a IUCN Category 1a - Strict nature reserve.** A strict nature reserve is an area set aside to protect biodiversity and geological/geomorphological features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring.

The EIS does not reference significant species in, or the protection required for, Ben Halls Gap Nature Reserve. The EIS states, "an appropriate buffer must be maintained with the National Park Estate where practicable" (page 278 Appendix D Biodiversity Development Assessment Report). Ecologist Phil Spark suggests remnant open forest with a high abundance of threatened species should be buffered by at least a 500m setback.

Turbine placements on the boundary of Ben Hall's Gap Nature Reserve are not within acceptable distances from a non-host property boundary (i.e. 460 meters). "Turbines shall not be located within a distance two times the height of the turbine (including the tip of the blade) from a non-related property boundary" quoted from the guidelines of the Upper Lachlan Development Control Plan 2010 for Wind Farms and the Upper Hunter Development control Plan 2015 for Wind Farms. Additionally turbine placement within 100-meter boundary of Ben Hall's Nature Reserve is not acceptable for biodiversity and bushfire issues.

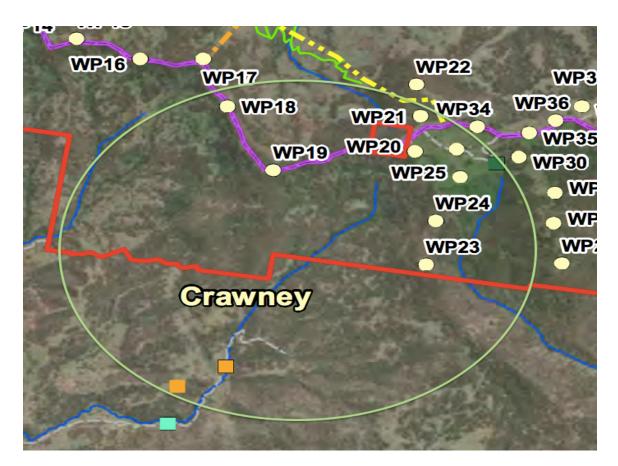
Turbine placement of WP 31,32,33,38,39,40,41,42,43,44,45 need to be extended to 460 meters from the Ben Hall's Gap Nature Reserve boundary therefore locating turbines on a > 30% gradient and non compliant with turbine development guidelines.

A total of 11 turbines require immediate removal from the project design.

Positioned on the Southern end of the Crawney turbine placement design, the immediate turbine removal is required based upon distance to 2 non-associated residences NAD 01 and NAD 69. The 2 non-associated properties have had little or no consultation with 1 dwelling having desktop analysis for visual assessment.

Turbine numbers WP 18,19,20,23,24,25 are all situated under the required distance of 3100 meters from the non–associated dwellings that have no benefit sharing agreements with the project.

# A total of 6 turbines require immediate removal from the project design.



Further assessment (soil suitability, remnant vegetation & terrain constraints) is required for turbine placements on the South West corridor of the project. All relevant groups for assessment of the project have been denied access including CCC members, the Australian Wind Commissioner and a ERM employee stated no-one had viewed this site. Local knowledge indicates turbine placements are located on narrow ridgelines not suitable for wind turbine structures.

Total Turbines to be removed from the "Hills of Gold Wind Farm" project.

Total	42
Crawney non-associated residents	6
Ben Hall's Nature Reserve	11
Hanging Rock non-associated residents	18
Ben Hall's Gap State Forest	7

- 9: Please supply lease agreement for landowner 12, the NSW State Government. Please provide detailed maps and description of intended use within the development project with landowner 12.
- 10: If no lease agreement in place, please justify turbine placements distances of 10m to 60m buffer zones to non-related property boundary of Ben Hall's Gap State forest. If no lease agreement, please provide new mapping for turbine placement 460m from the boundary of Ben Hall's Gap State Forest.
- 11: With limited data provided for flora & fauna on the Southern side of the project please explain the impact to biodiversity of the close turbine placement on the boundary of Ben Hall's Gap State Forrest?
- 12: Given the catastrophic bush fires in the Hanging Rock district in 2020 what is the recommended and industry standard distance for Turbine placements from Ben Hall's Gap State Forest for bush fire protection?
- 13: Please provide details of landowner 14 hosting of project infrastructure?
- 14: Please provide confirmation of benefit sharing agreements with 21 non-associated Hanging Rock dwellings within 3100m of the project? If no agreements confirmed please remove 18 turbines from the project design. (WP 53-70)
- 15: Please explain why there is no record of a non-associated dwelling DA location at turbine location WP57 and update project data?
- 16: Ben Hall's Gap Nature Reserve is classified IUCN Category 1a Strict nature reserve. Does the proponent recognize the significance of this classification for the protection of endangered species in Australia? If so please justify turbine placement under 100m from such a significant ecological site?
- 17: Ben Hall's Gap Nature Reserve is a non-host property boundary with State significant rating, why is the turbine placement inside the required 460-meter buffer zone?
- 18: Please provide updated turbine layout 460m from Ben Hall's Gap Nature Reserve.
- 19: With limited data provided for flora & fauna on the Southern side of the project please explain the impact to biodiversity of the close turbine placement on the boundary of Ben Hall's Gap Nature Reserve?
- 20: Given the catastrophic bush fires in the Hanging Rock district in 2020 what is the recommended and industry standard distance for Turbine placements from Ben Hall's Gap Nature Reserve for bush fire protection?
- 21: Please provide confirmation of benefit sharing agreements with 2 non-associated Crawney dwellings within 3100m of the project? If no agreements confirmed, please remove 6 turbines from the project design. (WP 18-20,23-25)
- 22: What has been the level of consultation with property NAD1?
- 23: Visual effects rating based upon desktop assessment "low" for NAD1, please conduct photomontage to verify?

## 5: Transport:

The transport analysis provided in the EIS is misleading and incomplete. There is no traffic assessment of the village impacts, intersections, safety of local residents, school impacts, multiple travel routes, multiple blade lengths and little to no consultation with residents with blade swing over properties.

TTPP transport planning has provided the assessment for the EIS with framework and assumptions based upon "The RTA Guide to Traffic Generating Developments for Rural Roads" version 2.2 October 2002.

The table below is the basis of traffic flow, level of service, terrain and heavy vehicle movement for Nundle and Hanging Rock areas, however the table and guidelines do not reflect this conditions and traffic flow of the area. Level of Service in Nundle and Hanging rock is classed as A. This, the top level is a condition of free flow in which individual drivers are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to manoeuvre within the traffic stream is extremely high, and the general level of comfort and convenience provided is excellent.

Level of Service E: This occurs when traffic volumes are at or close to capacity and there is virtually no freedom to select desired speeds or to manoeuvre within the traffic stream. Flow is unstable and minor disturbances within the traffic stream will cause a traffic-jam.

Table 4.5
peak hour flow on two-lane rural roads (veh/hr)
(Design speed of 100km/hr)

Terrain	Level of Service	Percent of Heavy Vehicles			
		0	5	10	15
Level	В	630	590	560	530
	С	1030	970	920	870
	D	1630	1550	1480	1410
	E	2630	2500	2390	2290
Rolling	В	500	420	360	310
	С	920	760	650	570
	D	1370	1140	970	700
	E	2420	2000	1720	1510
Mountainous	В	340	230	180	150
	С	600	410	320	260
	D	1050	680	500	400
	E	2160	1400	1040	820

The data for Table 4.5 assumes the following criteria:

- terrain level with 20% no overtaking.
- rolling with 40% no overtaking.
- mountainous with 60% no overtaking.
- 3.7 m traffic lane width with side clearances of at least 2m.

Traffic impacts for construction period 3.5 appendix G Traffic and Transport Assessment "assumes all traffic would go to Morrison's Gap road... no traffic data was available for Morrison's Gap road however it is expected volumes would be very low less than 10 vehicles per hour...The assessment shows that almost all the roads would operate at Level of Service A during the peak of construction. If we consider Oakenville Street as mountainous and includes Barry Road, then this would be revised to Level of Service B. In all cases the level of service is equal or better than the Level of Service B which is better than the recommended desirable Level of Service C.

In terms of environmental capacity, the forecast volumes would be less than the maximum 300 vehicles for collector roads and less than 200 vehicles per hour for local roads. Thus, the Project related traffic would operate within environmental capacity guidelines.

- 24: Please provide calculation method for level A? Does it exist in the RTA document?
- 25: Please provide traffic peak hour flow for rolling & mountainous terrain for level A?
- 26: Please provide traffic peak hour flow for rolling & mountainous terrain for level A for percent of heavy vehicle greater than 15%?
- 27: The data table presented by the RTA assumes rolling terrain with 40% no overtaking and 3.7m traffic lane width with side clearance of at least 2m, this rolling terrain represents Lindsay's Gap road, does the proponent accept this does not represent the road and its assumed criteria? What % does the proponent accept as the Lindsey Gap Road overtaking capacity?
- 28: The data table presented by the RTA assumes mountainous terrain with 60% no overtaking and 3.7m traffic lane width with side clearance of at least 2m, this rolling terrain represents Barry road from Nundle to Hanging Rock, does the proponent accept this does not represent the road and its assumed criteria? What % does the proponent accept as the Barry road Nundle to Hanging Rock overtaking capacity?
- 29: If the data table is not adopted for peak hour flow and level of service, what would be the percentage of increased traffic movements acceptable to rural communities? 100%? 200%? 500%?
- 30: Due to massive increase in traffic movements I request an immediate independent assessment based upon the traffic capabilities and capacities of the actual roads within the project area and Nundle village not based upon a RTA table which sets a guideline. The study should also include percentage increases in traffic flow not only travel movement numbers?