

**From:** [REDACTED]  
**To:** [Do-Not-Reply IPCN Submissions Mailbox](#)  
**Subject:** Submissions re-opened on additional material for Hills of Gold Wind Farm (SSD-9679)  
**Date:** Thursday, 18 July 2024 3:55:06 PM

---

I am traveling in my caravan through central north Queensland and an only have intermittent internet. Discovered my submission was not published. On investigation, I discovered that Microsoft had upgraded the Mail program and blocked all emails to and from my old email program. Please see attached copy of this happening on July 11. I ask if you could please accept this submission, although late, not my fault, but due to Microsoft enforcing their monopoly rules.

I wish to make the following submission :

The Hills of Gold Wind Farm will not be viable when you consider it's capital return competing against the second much larger and cheaper local wind farm on the nearby DPI approved Liverpool Range.

Engie claim that this approval is urgent and that the commission urgently need to approve an extra 15 turbines, in their own words, to make this proposal viable. Engie claim this is urgent to start supplying this energy asap and to make power generation and energy costs cheaper.

This is far from factual. Please look at the data above for the Liverpool Range windfarm which they expect to be approved and construction commenced this year, 2024.

Lets compare the figures supplied by each wind farm proposal:

Liverppol Range: 185 Turbines    Cost: \$1.5 billion. Gen: 1,329 MW. Homes: 570,000  
Cost per home \$2,632

Engie Hanging Rock: 47 Turbines    Cost: \$800 million Gen: 282 MW    Homes: 115,000  
Cost per home \$6957

Engie upgraded    62 Turbines    Cost: \$833 million. Gen 372 MW    Homes: 163,000  
Cost per home: \$5110

The approved 47 turbines will be 264% more expensive than the Liverpool Range Windfarm

The so called urgent 62 turbine request to make cheaper power is still 194% more expensive then Liverpool Range. Engie will not be in a position to compete against the Liverpool Range Wind Farm to recoup their massive construction costs.

Nor is the proposed Hills of Gold a seriously urgent 'public benefit'. The Liverpool Range fulfills this urgent need, supplying power for 570,000 homes as opposed the Engie's 163,000 homes at almost 200% more cost and far more cost in maintenance. The Liverpool Range will service the 163,000 homes that Engie will service at double the price!

I also question the submitted viable costs to construct the wind farm. Based non submitted costings, the Hills of Gold Wind Farm is very much borderline, even when you don't consider the competition from Liverpool Range. Engie have not even included the massive extra costs for the required massive underpinning of the wind turbines due to the fragile unstable site terrain. Nor have Engie costed the massive road building costs requiring the huge upgrades of at least 4 bridges to

carry the very heavy loads nor have they costed the upgrades to the rural roads required to transport the heavy and numerous loads. The rate payers cannot be expected wear the burden of a foreign French company's earnings.

These costs alone would push the viability of this wind farm over the edge.

Engie also rely on the rising price of energy to justify the viability of this windfarm. Yet every renewable advocate tells us that as we develop more renewable energy, the costs of energy production will decrease. So, what is true?

The serious question of the viability of the proposed Hills of Gold Wind Farm have not even considered the long term viability re cost of maintenance. Moreso, is the unsuitability of the proposed location on a ridge or front edge of a plateau – both scenarios apply to this proposal.

Wind turbines in mountains accelerate fatigue damage and premature failure and can shorten life to as low as just 10 years. My Daughter lives in Germany and has made me aware of the serious problems they have experienced to severely shorten wind turbine life:

QUOTE: David Heidenreich /Chief Engineer (Ret.) / AeroTorque Corporation

*Wind turbines see a broad range of dynamic loads that most large, ground-based rotating machines do not. They experience variation from the grid and generators (in the form of curtailments, grid loss, and voltage changes) and also see frequent wind changes that are occasionally extreme. Storms, gusty conditions, and even a sudden wind loss can cause significant variability in drivetrain loads and a reduction in the expected life of drivetrain components. Wind turbines see other challenging wind conditions as well. Extreme wind events have been defined for a long time. However, their ability to cause torque reversals of a magnitude that can damage a turbine has only recently been recognized and measured. The ultimate wind-load cases during normal running were defined. The blades can be loaded non-linearly, sending varying loads going through the drivetrain. Shear winds are most often experienced by turbines on ridge tops and those located near the front edge of a plateau. Winds striking the face of these mountains deflect vertically, resulting in shearing winds. This is precisely the issue with extreme wind shear, and gusty and turbulent winds. A sudden change in direction can result in momentary torque reversals that can cause damage to the turbine drive system. Blade-control systems cannot always react fast enough to mitigate these fractional-second loads, especially during rapid stops during high wind speeds. The only way to try and mitigate this damage is to reduce efficiency by as much as 30%. This being the case, how does your investor feel about this very marginal wind farm? In Germany, this had been recognised as a major factor in shortening the service life of a wind turbines in mountainous conditions. – shortening the life to as little as 10 years.*

This will end up as an embarrassing expensive white elephant that has destroyed this community for absolutely no benefit whatsoever to the public.

Paul Elbourne



Nundle. NSW 2340

[Reply](#)   [Forward](#)

Submissions re-opened on additional material for Hills of Gold Wind Farm (SSD-9679)

Submissions re-opened on additional material for Hills of Gold Wind Farm (SSD-9679)

