To the Commissioners

SSD 9679

I wish to highlight some economic considerations for the IPC to consider when making a determination on the viability of the Hills of Gold wind farm.

While I understand the approach adopted by the "Panel" in terms of their assessment of the information provided by the proponent I fail to see why the analysis has not included some fundamental economic principals for investment. (1) Initially how much will the project cost to build, (2) chances of cost overruns, (3) industry comparisons,(4) Projected income and the effects of 1& 2 of the profitability of the project and (5) decommissioning risk. While the proponent may claim some of this information maybe commercial in confidence however they are also claiming the project reflects "public benefit" and compulsory acquisitions so a detailed budget and explanations should have been provided.

PROJECT COST:

I am simply applying what limited detailed information the proponent has provided.

"The Proponent's current build cost projection to deliver the Project with 62 turbines in 2025-2026 is estimated to be approximately 2,630 $/kW. " 4.4 p15

Proponent estimated cost 2,630 $/kW = 2.63million $ / MW x 372 MW project capacity (62 turbines x 6MW)

Total build cost $2.63 million /MW x 372 MW = **$978.36 million**

COST OVERRUNS

The possibility of cost overrun for this project is a certainty when you consider the following:

Soil type: As shown in previous submissions provided by experts, landslips are evident across the development footprint (Scone/Willow Tree bypass road explains the constructability costs and difficulties) and soil type is not consistent with large-scale construction.

Rainfall: The Hills of Gold ridgeline represents significant higher rainfall patterns with influence from both inland and coastal rainfall patterns over the lower valleys, this is why Chaffey dam is an excellent water catchment. Expect significant delays over construction periods in winter with the very real possibility of no construction over this time period.

Terrain: Possibly the most difficult site in NSW to develop a wind farm, as quoted by previous Australian Energy Infrastructure Commissioner Andrew Dyer during a site visit as "the worst candy in the lolly shop". There has been no detailed analysis of the Western corridor of the project as the steepness and narrow ridgeline (2 horse wide) prohibits any inspection.

With data provided by the proponent I expect turbines 5,7,8,9,10,11,12,15,16, and 18 which represent unviable wind generation and high construction cost will not to be built. This will add to considerable fixed cost burden to the remainder of the project.

Turbine	Variable capex ($million)	Annual energy production (net MWh)
WP2	14.8	16,500
WP3	13.2	14,600
WP4	13.3	13,100
WP5	14.4	11,100
WP6	15.7	14,000
WP7	11.8	12,400
WP8	11.7	12,661
WP9	14.6	12,895
WP10	13.3	12,648
WP11	13.3	11,000
WP12	14.6	11,900
WP13	11.7	14,037
WP14	11.7	13,000
WP15	13.7	12,000
WP16	14.9	10,000
WP17	15.0	13,000
WP18	13.4	10,300
WP20	13.3	15,007
WP21	11.9	15,366
WP22	13.7	15,581
WP25	13.7	14,244
WP26	11.8	17,400
WP28	13.3	17,400
WP29	14.0	15,000
WP30	11.9	14,400
WP32	12.0	16,400
WP33	15.3	15,400
WP34	13.7	14,206
WP35	13.4	15,900
WP36	11.7	17,800
WP37	13.2	17,800
WP38	11.7	19,300
WP39	11.7	19,400
WP40	14.5	19,100
WP43	12.0	20,600
WP44	11.7	21,000
WP45	13.6	20,700
WP46	13.2	18,700
WP47	11.7	19,100
WP48	11.8	19,600

Build timetable: Based upon experience with other projects the “panel” has estimated construction timetables as 60% year one and 40% year two for completion. Wow what an assumption, based on my assumptions I expect significant delays given rainfall, soil type, steep & narrow terrain, limited one-way access restrictions, work force, material cost etc I expect a minimum 4-5 year construction timetable.

Industry comparison:

Bowmans Creek Wind Farm: This project represents an excellent case study comparison with the Hills of Gold wind farm with both located within the Upper hunter shire region, project footprint and energy generation of similar metrics.

IPC consent received 6th Feb 2024 for **56 turbines**

347 MW capacity

Estimated build cost **$569 million = 1,640$/kW**

Bowmans Creek represents a 40% construction cost / kW benefit to the developer over the expected development costs of the Hills of Gold wind farm project. Bowmans Creek Wind Farm represents a viable investment project for the developer.

Projected income:

With an abundance of energy sources available in Australia we should have the cheapest electricity in the world. However retirement of coal-powered stations and the lack of domestic gas reservation policies make the push for renewable energy at the forefront of domestic energy generation. For the Hills of Gold wind farm project the proponent has expected well above industry expectations in terms of pricing for wind generation power.

Decommissioning risk:

Under the projected 30 year lifespan of the Hills of Gold Wind Farm the appropriation of funds for decommissioning of the project commences in year 16, half way through the project life. (This was confirmed in the Nundle Town Hall meeting in 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 projects presently under consideration creating further competition for transmission line access and the extremely high construction costs of the Hills of Gold wind farm the risk associated with the project is extremely high. There is certainly no public benefit with a stranded unviable asset sitting on a 1200 metre elevated ridgeline with a community/ land host holder chasing a foreign company for capital to remove the infrastructure.

While Wind farms will play a key role in delivering the State's emission reduction and energy transition goals but it cannot be for projects that are unviable and have no ability to be constructed. I have spent many decades in the financial investment space and this project represents a process for the proponent in terms of funds management, the raising of capital and the generation of fees. This project is 100% unviable and will never be built, I ask the commissioners the reject the project in its entirety.