Andrew Glencross Primary Producer 'Yurunga' 3816 Saxa Rd, Gollan NSW 2820 0427889964 20/08/2023

NSW Department of Planning and Environment Department of Planning and Environment, Locked Bag 5022, Parramatta NSW 2124 4 Parramatta Square, 12 Darcy Street, Parramatta NSW 2150 Subject: Objections/Concerns Regarding Spicer's Creek Wind Farm Project

Dear Members of NSW Department of Planning and Environment,

I hope this message finds you well. My name is Andrew Glencross, and I am writing to you as a concerned community member, business owner and primary producer with tertiary education in rural science. I am writing to express my concerns and objections regarding the Spicer's Creek Wind Farm Project that is currently under consideration. While I fully appreciate the efforts and intentions behind the project, I believe it is crucial to address the following issues before proceeding further:

 Unidentified impact on management of pest species in the Gollan area: I am deeply concerned the impact of the Spicer's Creek Windfarm project will have on the management of pest species, both vertebrate and invertebrate, on Gollan and surrounding areas. This year alone we have faced challenges in the management of mice, rats, foxes, pigs, wild dogs, locusts, and aphid species including the highly phytotoxic 'Cowpea Aphid'. Control of the listed vertebrate species relies on coordinated baiting and shooting programs that are undertaken by local land holders in conjunction with baiting and control measure supported by the LLS. In conversations I have had with local landholders whose houses are directly impacted by

the project, many of these landholders are intending to move away from the area and do not intend to try to occupy their vacant homes with workers due to the impact of turbines on these residences and the health risk it would pose to employees of their farms. Additionally, many of the identified invertebrate species have required timely chemical control methods to ensure that they are killed prior to certain stages of their life cycle, for example the Cowpea Aphid must be controlled by chemical application during the nymph stage and depending upon the growth stage of the host plant, this at times needs to completed by air. In 2004 the local area had a significant locust plague that required coordinated aerial sprays to minimise the decimation of local flora, herbages, grasses and cereal crops. At no time when Squadron Energy have met with me on my farm have they discussed how these significant impacts on my farm business and the local environment will be able to be supported, with many local land holders no longer intending on carrying out farming activities on their farms in the project area, and additionally the ability to utilise aerial control of pests is going to be significantly impacted by the ability to fly within the proposed turbines. Squadron Energy offered me and my family \$10,000 per year for the proposed impact of the windfarm, the pest damage from a locust swarm event to our property alone would result in more than \$500,000 of losses just in a single year.

- The Spicer's Creek Windfarm should not be approved for its current location, prime agricultural land. Due to the impact on landholders from pest species within the project area flowing onto neighbouring properties such as my own. Squadron Energy need to more appropriately identify land that does not already have an established use with crucial management practices in place.
- At times when pest species hit critical levels, control methods need to be applied within 24 to 48 hours of identification. If the NSW Department of Planning and Environment see that it is fit for the Spicer Creek Windfarm Project to operate, Squadron Energy need to identify a response strategy prior to the approval of the Spicer's Creek Windfarm that would allow for critical and pinpointed aerial sprays to take place withing the identified control window.
- 2. Impact of Spicer's Creek Windfarm on ground water: In several places throughout the EIS report, Squadron Energy refer to the use of water, the main points referring to the construction phase, fire mitigation and decommissioning of the windfarm project. At no time does the EIS report identify where the water will be sourced, only stating to be 'through negotiation'.

My farms, like many of the properties in the Gollan and surrounding areas rely on bore water. Both of my farms are set up with reticulated trough systems that utilise bore water to supply livestock with clean drinking water. Based on an average estimate of water required across the number of livestock on both of my properties, the water requirement of these animals is approximately 18,250,000L per year. At the height of the drought in 2018, the water table had dropped to a point that I could only pump 5,500L per day from each the approved bores on my properties. My daily need is 50,000L. My concern is that if underground water is going to be accessed and wasted on the Spicer's Creek Windfarm Project, there will not be enough water to support currently approved uses of the land and livestock will perish.

Underground water is replenished through rocky outcrops, such as the small limestone deposits that are seen around the local gully ways and lining creeks in the Gollan and surrounding areas. These points also require vegetation to slow and trap water runoff to allow this water to make its way underground. I am concerned that the proposed development of the Spicer's Creek Windfarm with land clearing and reconstruction to occur across more than 17,000ha, will have a significant impact on the function of the land to replenish underground water supplies and have a greater impact during times of drought. As identified by Squadron Energy in their EIS report, this land is drought prone, with the Gollan area experiencing a small El Nino event creating below average rainfall throughout 2023.

• The Spicer's Creek Windfarm Project should not be approved until Squadron Energy can identify the water usage required by all landholders within the project area, neighbouring the project area, and that are reliant on water catchment from the project

area. At no time have I been surveyed or interviewed by Squadron Energy about this crucial data.

- Squadron Energy need to identify all aquifer points within the Spicer's Creek Windfarm Project area and develop specific strategies to ensure these points are not disturbed and vegetation is not cleared from these points. Clearing from known aquifer points has led to the significant salination of underground water.
- Squadron Energy need to identify accurately where the water for all identified uses coming from and how the access to the water will impact the environment or add to carbon emissions.
- 3. Impact of ground wind turbulence on cereal crops: I am concerned about the impact of Spicer's Creek Windfarm Project on beneficial species of insects, such as bees, that various cereal, oilseed and legume plants require for pollination and seed yield. In many of the research papers I have read stating that windfarms are beneficial for crop yields, they only consider self-pollinating crops such as corn and soybeans where wind turbulence stimulates the self-pollination process. Based on the soils profile, climate and rainfall average, mostly these crops are not suited as an economically viable crop for the area located within and surrounding the Spicer's Creek Windfarm area.

There is emerging research on negative impacts of windfarms on the movement of bee and other beneficial insect populations. In studies I have read from areas of America and Brazil, the most significantly affected species within these studies was bees, which were identified through a drop in number of identified bees within and surrounding windfarm projects, as well as through loss of flowering and seed production of plants that require pollination by bees and other insect species.

My farm business relies on bees and other insects for the pollination of wheat, oats, barley, canola, lucerne and clover species. The financial viability of my farm business relies on these plants to yield to their current potential to not only support the sale of grain and oil seed, but also to produce feed for my livestock.

At no point in the EIS report does Squadron Energy identify the impact of the Spicer's Creek Windfarm Project on local production. With the Gollan area and other areas surrounding the project well known for the consistent production of cereal, oilseed and legume crops, Squadron Energy has overlooked a significant impact this project will have on established agricultural businesses. I would like:

- The NSW Department of Planning and Environment to not approve the Spicer's Creek Windfarm project in its current location on prime agricultural land. There are global studies emerging about the negative impacts on bees and these are a crucial element of the viability of all farms in the Gollan and surrounding areas.
- Squadron Energy have failed to identify any studies that have been undertaken on bee and beneficial insect populations. Squadron Energy have failed to identify the yield of crops that are reliant on pollination within the proposed windfarm area and neighbouring the windfarm. If this project is to be considered in its current locating, Squadron Energy need to complete these studies within and surrounding the Spicer's Creek Windfarm Project.
- Squadron Energy need to identify, in conjunction with local landholders, EPA and LLS, how it intends to monitor the impact on bees and beneficial insect species

within and surrounding the Spicer's Creek Windfarm Project prior to project approval.

- Squadron Energy need to identify how they will compensate landholders for the impact on production and business viability through the reduced production of grains, seeds and pastures due to the impact of the Spicer's Creek Windfarm Project.
- 4. Fire mitigation risks: While Squadron Energy have identified in their EIS some fire mitigation measures, I have concern that much of this plan has not been properly considered, especially considering my above point on the lack of identification on water sources for the Spicer's Creek Windfarm Project.

At no time when Squadron energy have met with me on my farm have they discussed these measures, senior project developer Kristin Old stated to me that windfarms do not pose any greater fire risks to the local area. Since that statement, I have been made aware that aerial measures for fire control are restricted within the windfarm and neighbouring the windfarm area, which does in fact create an increased fire risk for my farms that neighbour the Spicer's Creek Windfarm Project.

The existence of multiple renewable energy projects in the Central West Renewable Energy Zone means that collectively our area is put at a greater risk of fire and our insurance companies recognise this impact also. According to our insurance broker, due to the increasing complexity posed on farms from renewable projects, insurance premiums have increased significantly, with our premium set to double this year from \$10,000 per annum to around \$20,000 per annum. I would like:

- Squadron Energy to accurately identify the water source for their fire mitigation and litres required to ensure fire mitigation strategies will be adequate.
- For the Spicer's Creek Windfarm Project not to be approved for its current location. Local farms require responsiveness to fires with the potential of aerial control methods to be enacted within hours of a fire event. I have not been consulted about their fire mitigation procedure and therefor I cannot accurately plan how to respond to a fire or the responsiveness I can expect if the Spicer's Creek Windfarm Project is approved for its current location.
- If the NSW Department of Planning and Environment deems the location of the Spicer's Creek Windfarm Project as acceptable, prior to project approval Squadron Energy need to engage with affected landholders such as myself on how to develop effective fire mitigation plans with the existence of a significant windfarm project in close proximity.
- Our local Gollan RFS, and all RFS brigades surrounding the Spicer's Creek Windfarm project rely on volunteers from within the community to operate and effectively fight fires. With many residents proposing to move away from the area that live within the Spicer's Creek Windfarm Project, this will have a serious impact on the functioning of local brigades. Squadron Energy need to identify how they will commit resources in the form of personnel 24 hours per day, 7 days a week to ensure that brigades continue to function with a 30-minute response time to fire events, as they currently do without the existence of the Spicer's Creek Windfarm Project.

I would appreciate the opportunity to discuss these concerns in more detail and explore possible solutions. The impacts that I have identified from the proposed Spicer's Creek Windfarm Project are extremely concerning to me, thus I am opposed to this project until I see action on the points and actionable recommendations I have made in the above submission.

Sincerely,

Andrew Glencross