

## TRANSCRIPT OF MEETING

RE: SPICERS CREEK WIND FARM (SSD-41134610)

# **DEPARTMENT MEETING**

PANEL: PROF NEAL MENZIES AM (CHAIR)

MR MICHAEL WRIGHT

MS SUELLEN FITZGERALD

OFFICE OF THE IPC: KENDALL CLYDSDALE

TAHLIA HUTCHINSON

DEPARTMENT OF

PLANNING,

HOUSING AND INFRASTRUCTURE:

**CHRIS RITCHIE** 

NICOLE BREWER

NATASHA HOMSEY

**ELLENA TSANIDIS** 

LOCATION: ZOOM VIDEOCONFERENCE

DATE: 3:30PM – 4:30PM

WEDNESDAY, 14<sup>TH</sup> AUGUST 2024

#### <THE MEETING COMMENCED

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**PROF MENZIES:** Okay. So my name is Neal Menzies. I'm the Commission chair. I'm going to read out a formal statement to kick us off. After that formal statement, we intend this to be a very informal meeting, so that we can have an open discussion with you. So let me kick off with the formal thing, which includes an introduction of my fellow Commissioners and then we'll move forward with the general agenda that we'd set out.

- So before I begin, I'd like to acknowledge that I'm speaking to you from the land of the Turrbal and Jagera people and I acknowledge the traditional owners of all of country from which we're meeting virtually today and pay my respects to their elders past and present.
- Welcome to the meeting today to discuss Spicers Creek Wind Farm,
  SSD-41134610, currently before the Commission for determination. Spicers Creek
  Wind Farm Pty Ltd, a project entity owned by the Squadron Energy Group of
  companies, proposes to develop a 700 megawatt wind farm located approximately
  25 km northwest of Gulgong within the Dubbo Regional and Warrumbungle Shire
  local government areas.

The project site is in the Central-West Orana Renewable Energy Zone. The proposed project involves the development of up to 117 turbines with a maximum tip height of 256 metres, a 400 megawatt battery energy storage system, connection to the proposed Central-West Orana Renewable Energy Zone transmission line and other ancillary infrastructure.

My name is Neal Menzies. I'm the chair of this Commission panel and I'm joined by my fellow Commissioners, Michael Wright and Suellen Fitzgerald. We are also joined by Kendall Clydsdale and Tahlia Hutchinson from the Office of the Independent Planning Commission.

In the interests of openness and transparency and to ensure full capture of information, today's meeting is being recorded and a complete transcript will be produced and made available on the Commission's website. This meeting is one part of the Commission's consideration of this matter and will form one of several sources of information on which the Commission will base its determination.

- It's important for the Commissioners to ask questions of attendees and to clarify issues whenever it is considered appropriate. If you are asked a question and are not in a position to answer, please feel free to take the question on notice and provide any additional information in writing, which we will then put up on our website.
- I request that all members here today introduce themselves before speaking for the first time and for all members to ensure that they do not speak over the top of each other to ensure accuracy of the transcript. Okay, so now we can begin our less

formal discussion.

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MS BREWER: Thank you, Chair. Perhaps, Ellena, if you could share the slides.

## 5 **MS ELLENA TSANIDIS:** Yes.

MS BREWER: That's it. Thank you. So good afternoon, my name is Nicole Brewer. I'm the director for energy assessments at the Department of Planning, Housing and Infrastructure. I'm joined today here with my colleagues, Natasha Homsey, team leader, Ellena Tsanidis, planning officer, and Chris Ritchie, the acting executive director for energy, resources and industry.

I would also like to acknowledge the traditional custodians of the land on which we are joining today's meeting and pay my respects to elders past and present and also extend that respect to any Aboriginal and Torres Strait Islander people here today. Looking at the next slide, please.

I'm going to give a brief overview of the key assessment issues today, focusing on those from the Commission's agenda and the key reasons for the Department's recommendation to the Commission to approve the project. Next slide, please. The strategic and regional context for the project is that Squadron is proposing a 700 megawatt wind farm with 117 turbines and the Department's recommended approval of this proposed layout. The site's about 25 kilometres northwest of Gulgong in the Central-West region of New South Wales and it's within the Central-West Orana Renewable Energy Zone.

Before I get into the assessment issues, I think it's important to give a little bit of information about that strategic context. This is the fourth wind farm project referred to the Commission since 2019, following referrals of Bowmans Creek, Hills of Gold and Thunderbolt wind farms. The last wind farm approved by the Commission was the Thunderbolt Wind Farm and that was in May 2024 and the most recent wind farm that was approved by the Department was Yanco Delta Wind Farm in December 2023.

Really given that all coal fired powerplants in New South Wales are scheduled for closure in the next 20 years, the project would assist in providing large scale renewable energy generation to meet increased electricity demand and is consistent with New South Wales legislation and policies to reduce emissions. The project is located within the declared Central-West Orana Renewable Energy Zone and it would connect to the now approved renewable energy zone transmission line.

And also that supporting infrastructure in the region such as road upgrades to support renewable energy generation, including wind farms, would be coordinated by the New South Wales government through EnergyCo. The site is also suitable for a wind farm and has a high wind resource. The area surrounding the project site is less densely populated and has neighbours with large land holdings.

I do think it's worth mentioning that the assessment of a wind farm of this size in this location has been comparatively straightforward because of the site selection and that the wind farm has been designed to minimise potential impacts including locating the turbines and associate infrastructure within areas of lower biodiversity values, reducing the amenity impacts to the landscape and efforts from Squadron to resolve the issues through the project design and neighbour agreements, which have significantly reduced the potential for visual impacts and also that they've worked quite closely with the Councils.

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Next slide, please. The Department exhibited the EIS from 28 July 2023 until 24 August 2023 and received 67 unique submissions, consisting of 57 objections, seven in support and three comments. I would like to note that most of the submissions were received from people located more than 15 kilometres away from the project site. Twenty-two submissions were received from people located within 15 kilometres of the site and of those, 12 objected to the project.

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Advice was received from 20 government agencies, along with the two host Councils, which is Dubbo Regional Council and Warrumbungle Shire Councils. Mid-Western Regional Council also provided advice.

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Warrumbungle Shire Council objected to the project, noting concerns regarding workforce accommodation, transport and traffic impacts, community contributions and social impacts as their main concerns. The most common matters raised in public objections were social and economic factors, biodiversity and impacts to agricultural land. Those submissions received in support noted the benefits to the local economy through creation of local jobs, financial support for farmers, road upgrades and the improvements to road safety. Next slide, please.

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I'm now going to cover what we considered to be the four key issues for assessment, being energy transition, biodiversity, visual amenity and traffic and transport. Next slide, please. Regarding energy security, the Department considers that the project, it's consistent with the relevant national, state and local policy documents, which identify the need to diversify the energy generation mix, reduce the carbon emissions intensity of the grid, while also providing energy security and reliability. The project would have a capacity of 700 megawatts, which would generate enough energy to power about 370,000 homes and would save up to 2 million tons of greenhouse gas emissions annually.

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The inclusion of a battery energy storage system or BESS would enable the project to store energy for dispatch to the grid and that's when the wind isn't blowing or during periods of peak demand and increases grid stability and energy security. EnergyCo has identified the project as a candidate foundation generator, given it would have direct access to the electrical grid via the approved Central-West Orana REZ transmission project and it's on land where wind

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Central-West Orana REZ transmission project and it's on land where wind development is permissible with consent under the Transport and Infrastructure SEPP.

In light of all of these factors, the Department considers that the project is in the public interest as it would play an important role in increasing renewable energy generation and contributing to the transition to a cleaner energy system as those coal fired generators retire.

Next slide, please. So now on to biodiversity. Perhaps before I jump to biodiversity, did the Commission have any questions on the first issue or are you happy for me to continue?

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**PROF MENZIES:** Happy for you to continue. I'm seeing shaking heads from the other two Commissioners, so definitely.

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MS BREWER: Okay, thank you. So on to biodiversity. Squadron had focused on avoidance of the impacts through avoiding the higher quality native vegetation and habitat during their preliminary design process for the project. The project is situated on land that's been heavily disturbed by agricultural activity and is characterised by predominantly cleared land as a result.

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Approximately 81% of the development footprint is on land with no native vegetation. There are, however, some areas of remnant vegetation generally in the form of scattered paddock trees and patches of woodland along the ridgelines, local roads and the drainage lines. These areas of native vegetation only comprise approximately 19% or around 275 hectares of the project footprint. Of that 275 hectares, 128 hectares, so that's 9% of the development footprint, is woodland that's in moderate to good condition. Forty-four hectares is modified woodland and the remaining 102.8 hectares is located on derived native grassland.

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The project was designed to avoid and minimise impacts on threatened species and communities within the site, focusing largely on avoiding the impacts to areas of box gum woodland critically endangered ecological community, noting that the area of this community within the development corridor has decreased by 62% from the early stages of the project and the current design. Importantly, only 53.8 hectares of this occurs within the development footprint.

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Similarly, with respect to impacts on inland grey box woodland endangered ecological community, the area of this community within the development corridor has decreased by 70% between the early stages of the project and the current design, such that only 31.2 hectares occurs within the development footprint.

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Although box gum woodland is a potential candidate for serious and irreversible impacts, the Department's assessment found that the project is not expected to significantly contribute to the risk of it becoming extinct as it represents a very small portion of the box gum woodland present within New South Wales.

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The Department considered the total area of box gum woodland, using the extent

provided in the Threatened Species Scientific Community's 2020 advice. The Department understands that this advice is likely to substantially underestimate the actual extent of box gum woodland as listed in New South Wales, so there have been numerous efforts to provide a more up to date and accurate estimation of that extent.

In particular, Dr Colin Driscoll recently provided some information in relation to the Moolarben Coal Project that estimated a less conservative extent of box gum woodland in New South Wales. Using the estimate and the updated estimate from the 2006 final determination, the project would represent an impact of between 0.007% and 0.02% of the total remaining area in New South Wales respectively.

So the Department considers that it would be very difficult to conclude that an impact in that range is likely to contribute significantly to the extinction of box gum woodland. However, the Department acknowledges that as a precautionary approach, it may be appropriate to advise proponents to seek nature positive outcomes that may help further protect the box gum woodland community.

As such, Squadron has offered additional measures to minimise the impacts on box gum woodland, which involves securely conserving an area of around 54 hectares of box gum woodland, comprising equivalent areas of intact woodland, disturbed and modified woodland and derived native grassland that are proposed to be impacted and removed for the project. This would be achieved through a biodiversity stewardship agreement or BSA which establishes an agreement over a site for the purpose of rehabilitation, enhancement and protection in perpetuity and the Department has included a condition to this effect in the recommended consent.

In regard to flora and fauna impacts, four threatened fauna species reported within the site, the glossy black cockatoo, barking owl, little eagle and square-tailed kite. But importantly, offsets are only required to be provided for the little eagle and square-tailed kite where a development would impact breeding habitat. But as the development footprint for the project does not contain any potential breeding habitat for these two species, no credits have been generated.

At this stage, Squadron has also assumed the presence of the pink-tailed legless lizard and is committed to undertake seasonally appropriate surveys post-approval in late 2024 for this species. Foraging habitat for the large bent-wing bat and the large-eared pied bat were recorded during site surveys and is a potential candidate species for serious and irreversible impacts. As serious and irreversible impacts for this species are linked only to breeding habitat, which was not recorded within the project area, the project is not expected to have a significant impact to these species.

In regard to bird and bat strike, the adopted approach for assessing bird and bat strike for all wind farms in New South Wales is a combination of a risk assessment followed by post-determination adaptive management. This adaptive

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management approach involves stringent requirements for baseline monitoring, ongoing monitoring of strike during operation and triggers for adaptive management measures to avoid or minimise impacts.

- BCS raised concerns about potential bird and bat strike, particularly in relation to the survey effort and the turbine risk rating system, and in response Squadron provided additional justification and information in the addendum BDAR. The final assessment concluded that no turbines pose a very high risk, two turbines pose a high risk and 111 turbines pose a medium risk and four turbines pose a low risk of bird and bat strike. The Department's recommended conditions requiring Squadron to carry out detailed monitoring of the bird and bat strike impacts of the project and carry out adaptive management if the impacts are higher than predicted.
- The impacts to native vegetation and species would generate approximately 7,800 ecosystem credits and around 1,600 species credits and the Department's recommended conditions requiring Squadron to retire the required biodiversity offset credits prior to carrying out any development that would directly or indirectly impact biodiversity values requiring offset.
  - Overall, the Department considers that the biodiversity impacts of the project are acceptable, subject to the implementation of the recommended conditions and offsetting the residual impacts of the project. Next slide, thank you.
- On visual impacts, the Department visited the site and several non-associated receivers surrounding the project to assess visual impacts. In New South Wales, the Wind Energy Guideline, with its supporting visual assessment bulletin, was developed to guide the appropriate location of wind energy development in New South Wales and also to establish an assessment framework for the assessment of visual impacts associated with wind energy projects.
  - So the Department has assessed the project against the performance objectives in the guideline, which considers visual magnitude, multiple wind turbine effects, landscape scenic integrity, key feature disruption, shadow flicker, blade glint and aviation hazard lighting. The visual assessment bulletin provides guidance on the performance objectives within certain distances, known as the black and the blue line in the bulletin, of turbines as relevant to a proposed height of the turbine.
- The Department notes that the potential visual impacts overall for this project are less likely to be significant due to three key factors: the site selection and the number of surrounding receivers close to the site, the efforts from squadron to resolve issues through project design and we acknowledge that a number of proposed turbines was reduced by Squadron from 138 to 117 throughout its design process prior to submitting the EIS, and the deletion of 21 turbines has reduced the visual impact on the landscape and many non-associated receivers, particularly in and around Gollan and Dunedoo.

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And Squadron also has established neighbour agreements, which significantly reduce the potential for visual impacts such that there are three non-associated receivers within the black line, which is 3.4 kilometres for the height of turbines proposed under the bulletin.

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So starting with the assessment for public viewpoints, 16 public viewpoints, such as roads and lookouts, were assessed by Squadron's visual consultant, which concluded that while the project would become a visual feature in the area, it's unlikely to degrade the scenic values of the existing landscape features and the character of the areas in the vicinity of the project area would remain intact.

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Overall, views of the project would be limited by distance, intervening topography and existing mature vegetation. The Department considers that the visual performance objectives of the bulletin would be achieved at all public viewpoint locations.

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Now moving on to the assessment from private receivers, the Department's focused its assessment on the 35 non-associated receivers located within 5 kilometres of a turbine, which is the blue line described within the visual bulletin. Most dwellings would benefit from distance, intervening topography and screening of existing mature vegetation between the viewpoints in the project. The Department considers that the visual performance objectives in the bulletin are met at all receivers. In regard to aviation hazard lighting, the Civil Aviation –

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**PROF MENZIES:** Just before you move on, I have a quick question. So we've just met with the Applicant and one of the things they raised was in relation to the condition that the Department suggested, which is for non-associated receivers within 5 kilometres being able to ask for amelioration, visual screening, et cetera, and they were concerned that that was open to any non-associated receiver rather than just ones who were going to have a medium to high impact. I just thought it would be an opportunity to explore with the Department why they – why you have viewed this as all non-associated receivers can ask for screening.

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MS BREWER: Thanks for the question. So the recommended condition does extend out to offering visual mitigation for those receivers that are within the blue line out to 5 kilometres. This is something that's consistent with a number of other approvals, both through the Commission and the Department, that have been made.

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But it doesn't necessarily apply to allowing anybody – so it allows people to receiver visual mitigation but commensurate – and the wording is quite intentional, that it's commensurate with the level of impact on the residence and that it's aimed at reducing the visibility of turbines. So I mean, we'd be happy to consider if the Commission is looking for something alternate but that's the way it's worded, so that –

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**PROF MENZIES:** No, we're just trying to understand both sides of the

viewpoint here rather than taking a particular stance. So having had it raised by the Applicant, it made sense to ask you directly and you've given us a clear answer, so that's all we needed.

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**PROF MENZIES:** Fellow Commissioners, are we happy to move on again? Yes.

MS BREWER: Yes, great. So on aviation hazard lighting, the Civil Aviation Safety Authority, known as CASA, advised that the project is considered a hazard to aviation safety and recommended that the wind farm is obstacle lit with steady medium intensity lighting. The project is partially located within 200 kilometres of the Siding Spring Observatory and therefore falls within the dark sky region covered by New South Wales Government's Dark Sky Planning Guideline.

The observatory requested a consultation throughout the installation of the aviation lighting and Squadron's committed to consulting with the observatory in relation to that aviation lighting plan. The Department's recommended conditions requiring Squadron to install hazard lighting in accordance with CASA recommendations and in a manner that minimises any adverse visual impacts. Regarding shadow flicker, Squadron's assessment of –

**PROF MENZIES:** Let me stop you just for a moment, Nicole.

25 **MS BREWER:** Yes, of course.

**PROF MENZIES:** And this is triggered by aviation, so you may be about to speak about it later, in which point just park my question until then. Some of the people lodging complaints or objections, let me get the language right, objections to the proposal are worried about the impact of the turbines on the ability to use aeroplanes, helicopters to fight bushfires. Is that something you're going to talk about later or –

MS BREWER: I'm happy to answer the question now.

**PROF MENZIES:** Sure.

MS BREWER: I mean, I think the conditions require the final location of the turbines to be registered. So that means that that's available to any pilot, so that people know where the locations of the turbines are. The recommended conditions of consent also provide for an emergency plan, which is developed in consultation with RFS and other relevant authorities to what measures might need to be in place during bushfire conditions. So that would often require that the – for example, things like the turbines being held in a certain Y position so that it's sort of known when pilots are flying in the area during periods of bushfire.

There's also a policy statement that's been put out by AFAC, which kind of

confirms that it is still possible to be able to navigate around wind turbines in the event of fire with some of these measures in place.

**PROF MENZIES:** Sure. Thank you, Nicole. Once again, fellow Commissioners, are we happy to move on?

**MR MICHAEL WRIGHT:** Yes, I think just on that point, Neal, reading some of the commentary from the National Parks and Wildlife Service, I think they had concerns about negotiating in low visibility conditions, bushfire, et cetera, and then but I think their comment was perhaps lighting of those structures would assist, yes.

MS BREWER: I think the – I mean, I would say that Squadron will need to consult with National Parks given that they are in close proximity. It was recognised during the assessment that National Parks was a key stakeholder. So as part of moving forward with the emergency plans and other plans, they would need to consult with National Parks.

PROF MENZIES: Thank you.

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**MS BREWER:** If you'd like me to move on, Neal?

**PROF MENZIES:** Yes, yes. Thanks, Nicole. We'll keep stopping you as we have questions.

MS BREWER: No, please do. I think it's easier to do it as we go if that works for you. So regarding shadow flicker, Squadron's assessment of shadow flicker confirmed there would be no exceedances at any non-associated receiver but notwithstanding the Department's recommended conditions requiring to ensure that that does not exceed the 30 hours per annum that's in accordance with the guideline at any non-associated dwelling.

The Department also assessed the visual impacts of the project's ancillary infrastructure and considers that the project's ancillary infrastructure is also unlikely to have a significant visual impact on the location, given that it's located away from non-associated receivers, there's intervening topography and vegetation and Squadron has proposed landscape treatments and selection of those components with low visual contrast.

- **MR WRIGHT:** Neal, could I just ask a question there? Sorry, Nicole. Just on that shadow flicker, is that limit of 30 hours per year on those unassociated dwellings, is that likely to impact significantly on the operational capacity of some of those turbines if they need to shut down for extended periods or is it considered –
- 45 **MS BREWER:** Look, I think the assessment showed that there wouldn't be any exceedances. So I would say that it's unlikely to affect the operation because it's been designed with that in mind and that the assessment shows that it won't

exceed the 30 hours per annum.

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MR WRIGHT: I see, yes. Good, thank you.

MS BREWER: No worries. If I could have the next slide, please. For the purposes of the assessment, the Department categorised receivers into three clusters, the Golden Highway, the Upper Sandy Creek Road cluster, the eastern cluster and the eastern and southern cluster and to give you a snapshot of the visual impacts, we've included in the slides some photo montages from locations representing the three visual assessment clusters considered in detail by the Department.

So firstly toward the north of the project, we have two example locations, receiver SL002 at the top and receiver GH001 below. So at receiver SL002, which is also proposed to be hosting the Cobbora Solar Farm, if that's approved, there are three turbines that are located within 3.4 kilometres, the closest of which, and that's T3, is located 2.1 kilometres away. But despite the close proximity of this receiver to the nearest turbine, the Department considers that existing vegetation and topographical features mean that the visual magnitude objectives are met at this receiver.

At receiver GH001, there are no turbines located within 3.4 kilometres. The closest turbine, T1, is located 3.86 kilometres away. So given the distance between the project and this receiver and the intervening topography and existing vegetation, the Department considers that the visual performance objectives are met at this receiver. Next slide, please.

So continuing on with views from the east of the project from receivers along Spring Ridge Road, this slide shows the wire frame and photo montage for receiver SCR010, which is the only receiver in this cluster within 3.4 kilometres of a proposed turbine. So the closest turbine here is located 3.35 kilometres from the receiver but the photo montage shows that the impact of the intervening topography and vegetation reduces the visual impact of the turbines.

- The image to the right also shows the aerial imagery of that receiver located within the group of 12 receivers along Spring Ridge Road. And as you can see on that aerial image, receivers along that road are surrounded by existing mature vegetation along roadsides and the surrounding rolling hills and as such, the receivers would have limited views towards the project. So the Department's assessment found that given the limited visual impacts at all non-associated receivers in this cluster, the visual magnitude objectives are met. Next slide, please.
- Finally, views from the south of the project, from receivers in the vicinity of Lambing Hill Road and Saxa Road are shown on these montages. No non-associated receivers in this cluster are situated within the black line. The top of this slide shows receiver LHR009 where the closest turbine is 4.42 kilometres

away and the lower image shows SR009 with the nearest turbine being 4.46 kilometres away. So again, the Department's assessment found that receivers in this cluster also benefit from distance, intervening topography and existing remnant vegetation and that the visual performance objectives are achieved at all receivers.

So, in conclusion, the project would meet the visual performance objectives that are described in the visual assessment bulletin as it would not dominate the visual catchment and the recommended conditions require Squadron to offer landscaping to all non-associated receivers within 5 kilometres and implement reasonable and feasible measures to minimise impacts of the visual appearance of the development. Next slide, please.

So now to transport. So between the Port of Newcastle to the site, Squadron's proposing two transport routes and these are the standard route from the Port of Newcastle to the project site via John Renshaw Drive, Hunter Expressway, New England Highway and the Golden Highway towards Dunedoo, as shown in yellow on this figure. And the high load route would be used by vehicles that are transporting loads taller than 5.6 metres and that's shown in purple on the slide.

These loads would diverge from this route to bypass Denman. These vehicles would deviate off the Golden Highway and travel via Denman Road, Bengalla Road and Wybong Road, where they would re-enter the Golden Highway towards Dunedoo. So during construction, light, heavy and OSOM, the oversized vehicles, would access the site from the Golden Highway and then travel via two access points to be constructed along Sweeneys Lane for the oversized vehicles, heavy vehicles and light vehicles. Five access points along Tallawonga Road for the oversized, heavy and light vehicles and just one access point from Ben Hoden Road via Gollan Road for the heavy vehicles and light vehicles only.

So in regard to potential cumulative impacts, which can be an issue, particularly in areas in the renewable energy zone, although there are a number of projects in proximity to the project, none share the common transport route on the local road network. In regard to the construction traffic volumes, the vehicles would peak at up to 236 light vehicles and 248 heavy vehicle movements per day, 10 of which would be the heavy vehicles requiring escorts or those oversized vehicles and 80 would be bus trips for staff transport to and from the accommodation camp proposed in Dubbo.

To support that transport route for construction, a schedule of road upgrades is included in the recommended conditions and that requires Squadron to undertake these road upgrades to the satisfaction of Council and Transport for New South Wales, to repair any damage that's attributable to the development, to schedule heavy vehicle movements to avoid peak hour traffic and prepare a comprehensive traffic management plan.

Squadron proposes to use a network of internal access tracks for vehicle

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movements within the site and some of those access tracks involve vehicles crossing over public roads. Vehicles would not deviate from the network of access tracks on to the public road network, they would merely just cross to get across to the other side. In response to concerns raised by Warrumbungle Shire Council, the Department's recommended a condition requiring Squadron to repair any damage to the public roads at these crossing points, caused by project related traffic.

In addition, the project relies on a number of road upgrades along the transport route from port to site to accommodate the heavy vehicles requiring escort or the oversize vehicles. These upgrades would be undertaken by EnergyCo to support the renewable energy zone and so the schedule of road upgrades to be undertaken by EnergyCo are included in the recommended conditions of consent, but Squadron has committed to undertake any necessary road upgrades in order to transport those larger components of vehicles if they're not undertaken by EnergyCo. But that would be subject to a separate approval.

A school bus service operates along Saxa Road, with a school bus stop located on Sweeneys Lane and Squadron's committed to the schedules the OSOM or the oversize and heavy vehicle movements on Sweeneys Lane and use of the site accesses outside the peak school hours to avoid interruption of that school bus service and the Department's recommended conditions for a traffic management plan to address that matter.

So with the road upgrades, regular road maintenance and the implementation of the traffic management plan, the Department considers that the project would not result in unacceptable impacts on the capacity, efficiency or safety of the road network, subject to the implementation of the recommended conditions. Were there any questions on transport before I move to –

**MR WRIGHT:** Sorry, Neal, can I ask Nicole a question? In terms of TFNSW's view, are all the issues that they raised effectively resolved through the conditions proposed?

**MS BREWER:** They are. The agencies were involved in review of the conditions.

MS SUELLEN FITZGERALD: I've got a question too, Nicole, about the leakage of vehicle traffic from the site back to the Golden Highway, particularly from the southern and western access points. There seems to be a network of local roads that go west towards the Golden Highway and Dubbo. What's to stop leakage of vehicles on to those local roads?

MS BREWER: So the road transport routes are defined in the consent. So the recommended conditions outline the roads that are proposed to be used and outline where the use of certain roads is either the use of the road or the crossing point. So in particular, down in that western area, we've been careful to word that in a way to make sure that it's clear that they are for the purpose of crossing points rather than travelling all over that network in that southern and western area. That was a

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concern of Warrumbungle Council that we sought to address through that wording in the conditions.

**MS FITZGERALD:** Thanks, Nicole. That's helpful. And so there's no proposals for monitoring to ensure compliance with those agreed road access points?

MS BREWER: I think the traffic management plan would include – let me just have a look. I think that's something that could be addressed through the traffic management plan and as part of I guess the overall implementation where a project is approved, there is quite an involved system of compliance with independent audits confirming that the project has met the conditions and has things in place to demonstrate that it has met certain conditions. So it's covered through traffic management plan but also through that overall process of independent audits during construction and our compliance team often goes out and visits sites.

MS FITZGERALD: Okay, great. Thanks. We'll look at that closely on site. The other thing too I had, Neal, was I saw your mention, Nicole, in your report about regular maintenance of all roads that are being used during the construction phase. So do you envisage then that the maintenance of the roads would be more than just prior to construction commencing and then a dilap and a repair job at the end of the construction phase? I guess my question is what does regular maintenance of all of the roads over a three and a half year period mean?

MS BREWER: So I guess the conditions are set up to create a safe operating environment from the outset of construction but obviously over long periods of construction, that can mean that there may be related damage. Now, if that is a safety issue, there is a condition of consent that requires the Applicant to as soon as people after they've identified something that has a safety implication, a large pothole or something like that, that they would rectify that damage.

That might not be what you would – the type of rectification works may be as emergency works and then they're completed to bring the road back up to its pre-construction standard at the end of the construction. But there is a facility in the consent to allow for that maintenance if it's required through the construction process.

MS FITZGERALD: Thanks, Nicole.

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40 **MS BREWER:** If there are no questions, I'll –

**PROF MENZIES:** Happy for you to proceed, Nicole.

MS BREWER: Yes. Okay. So I'll now talk about some selected other matters that the Department did consider during its assessment to give an overview of some of the adjustments to the project proposed by Squadron and recommended by the Department and the consultation with EnergyCo and the Department's site

inspections. Next slide, please.

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So noise and vibration, over the construction period, construction noise levels would exceed the recommended noise affected criteria of 45 dBA at only three non-associated receivers and that would only occur during road upgrades, which would be completed within a short six month period. So the noise levels would also be well below the highly noise affected criteria of 75 dBA at all non-associated receivers during the standard construction hours.

- Road traffic noise would comply with the road noise policy at all but one non-associated receiver but that receiver actually already receives exceedances and the contribution of this project would be less than 2 dBA, which is a level that's unlikely to be perceptible to the average person.
- The construction vibration criteria can be achieved 20 metres from the project and given that the proposed construction activities are all located more than 100 metres from non-associated receivers, the project would be able to comply with that criteria. So the Department's recommended conditions restricting works to standard construction hours with no works permitted on Sundays or New South Wales public holidays. They do allow for works that are inaudible at non-associated receivers to occur outside the standard hours.

The noise impact assessment also included an assessment of the noise impact on the amenity and recreational uses within the Dapper Nature Reserve in accordance with the noise policy for industry. It's worth noting that there is no recreational use in this nature reserve and permits are required for entry.

So the noise impact assessment predicts that a combined total noise level at Dapper Nature Reserve, including operation of the turbines and ancillary infrastructure of 40 dBA and it applies a correction factor for low frequency noise for those locations on a walking trail closest to the project of 2 dBA and 5 dBA during the day period and evening night periods respectively. So accordingly, the noise impact assessment concludes that the project would achieve the relevant criteria of 53 during the day, evening and night periods.

So both the Department and the Environment Protection Authority consider that the operational noise impacts of the project can comply with the requirements of the Department's noise bulletin and the project, like all wind farms, would be subject to those strict noise limits that would be imposed through an environment protection licence.

**MR WRIGHT:** Sorry, Neal. Could I just ask Nicole a question about the host and neighbour agreements that Squadron has put in place? What status do they have should there be a change of ownership of one of those properties? Would that have any impact on the consent? I would think not but just a question. So if say that new owner came in and didn't perhaps agree with the agreement, so to speak.

**MS BREWER:** I think that's probably a question for Squadron. The association, as I understand it, for the associated receivers or where they have those neighbour agreements is with the current landowner but I'm not aware if there are provisions for new owners. I would imagine that that would – they are coming after the existence of the wind farm being in place, but perhaps that's a question for Squadron.

MR WRIGHT: Thanks.

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- MS BREWER: I might move on to heritage then. So there are no non-Aboriginal heritage items listed on Commonwealth, national or state registers within the project area. There are five listed local heritage items in the surrounding area but there wouldn't be any direct impact to any of these sites or their associated curtilages and the Department's also satisfied that there would be no impact to historic heritage.
  - On Aboriginal heritage, 64 Aboriginal heritage items were identified within proximity of the project and all but 13 sites were determined to have low significance. Squadron committed to avoiding impacts to two sites of high significance, the grinding groove site of moderate significance and the potential stone procurement area. They would avoid impacts to a third site of high significance if possible but if the impacts are unavoidable, they'd salvage the artefact, as recommended in the Aboriginal cultural heritage assessment.
- Squadron's committed to undertaking management and impact mitigation measures such as avoidance, collection and salvage for all 13 Aboriginal sites within the development corridor identified as having high moderate or low moderate significance, as was recommended in the Aboriginal cultural heritage assessment. Heritage New South Wales confirmed that the proposed impacts to Aboriginal cultural heritage can be adequately managed through the recommended conditions of consent.
- In regard to land use compatibility, the project site's dominated by agricultural land use, primarily sheep grazing with some cattle grazing and cropping.

  Electricity generating works including wind farms are permissible with consent within the project area and I would note that wind harvesting is a passive land use that can coexist with grazing activities which can continue concurrently throughout the project lifespan and on project decommissioning, the land would be rehabilitated.
  - While the project would reduce the available land for agricultural uses during construction, the long-term use of land for agricultural purposes would not be compromised during the operation of the project.
- Portions of the site are partially overlapping with two exploration licences and MEG raised concerns that it could potentially restrict access for mineral exploration. But the Department acknowledges that Squadron avoided potential

impacts to EL, the exploration licence, 8338, by undertaking consultation with the relevant licence holder and did amend the project design prior to exhibition of the EIS.

5 **MR WRIGHT:** Nicole, was Squadron able to get in contact with the other exploration licence holder? I think there were two.

MS BREWER: I'd have to check with the team. I'm not sure if the –

MR WRIGHT: Just reading through the documentation, I think they attempted on numerous occasions but had trouble actually making contact with them.

MS BREWER: That's something perhaps that we can take on notice.

15 **MR WRIGHT:** Yes.

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**MS FITZGERALD:** Nicole, this might be a time to ask about the subdivisions that are proposed. Is there any problem with the size of those subdivisions being below that permissible subdivision size under that zoning in the LEPs?

MS BREWER: So the subdivisions are proposed for the purposes of the substations, yes, so the Department's considered in its assessment that although that's below the minimum size, it doesn't – it's not intended that there would be a dwelling on those subdivided lots, that it's for the purposes of allowing the wind farm substations to be constructed and allowing that I guess portion to be excised to the electricity authority. So we don't view that there's – yes, sorry.

**MS FITZGERALD:** There's no lack of permissibility, you're confident that we can approve if we want a smaller subdivision size?

MS BREWER: That's the Department's view currently, yes.

MS FITZGERALD: Yes. Great.

- MS BREWER: On water resources, so water required for the construction of the wind farm is around 80 to 120 megalitres, which is typical for a wind farm of this size. Squadron proposes to get the water for construction operation from multiple sources, including harvested run off and sediment basins and farm dams under agreement with the relevant holders. Squadron might also utilise other licensed water sources, including groundwater purchased from adjacent landowners, water purchased from Dubbo Regional Council and by purchasing and transporting water to the site by tanker. During operations –
- PROF MENZIES: Nicole, let me just stop you there. Maybe we've learned something from the Applicant that the Department's not aware of but they'd indicated that they've reached agreement with Dubbo Shire Council to upgrade their sewerage treatment plant and use so you're nodding, you're aware of this?

MS BREWER: Yes, we are aware of it. Sorry. They have amended – their assessment did leave it open to a number of sources, but yes, we were aware that they had reached that agreement with Dubbo Regional Council. We've been aware that they've been working quite closely with Council on that issue as well as the accommodation issue over some period, yes.

**PROF MENZIES:** Okay, thanks. I just wanted to be sure that, you know, full disclosure, everyone knew what was going on. Good.

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MS BREWER: Yes, thank you. In terms of water demand during operation, that's just limited to amenities uses and there's expected to be minimal. Squadron has committed to providing access along Murrawega Road to the groundwater bore that was of a concern to Water New South Wales. Squadron's also confirmed that it's unlikely it would intercept an aquifer, given the depth to the groundwater across the majority of the site is more than 20 metres.

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Although there may be groundwater that's shallower on the lower slopes of the site, particularly in close proximity to waterways, there are no turbines located proposed in those areas. And notwithstanding, Squadron's committed to undertaking some additional geotech investigations before those site prep works to confirm the groundwater levels at the location of each turbine. And flood modelling for the project demonstrated that the site, including relevant access points, is of low flood risk with minimal risk to changes in internal or external waterway flows. Next slide, please.

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Squadron's committed to sourcing materials locally and as close to the project site as practicable, including reusing material excavated from turbine foundations, roadworks and other earthworks where practicable. Squadron's also committed to using topsoil cleared during construction for the rehabilitation works where possible.

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In regard to social and economic, the project would provide benefit to the community by providing approximately 590 construction jobs, expenditure on accommodation and businesses in the local economy, with benefits more broadly to the state through an injection of \$2 billion capital investment into the economy. There would be additional money that would flow into the local economy over the construction period as well.

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Squadron's already entered into a voluntary planning agreement with Dubbo Regional Council and would also enter into one with Warrumbungle Shire Council and the total contribution payable would be 1.5% of the CIV for the final layout of the project and that's proportioned based on the number of committed turbines within each Council's LGA.

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There are a number of submissions that raised concerns about the potential adverse impacts on property values, but the Department notes that the Land and

Environment Court's ruled on several occasions that the assessment of impacts on projects on individual property values is not generally relevant unless the project would have significant and widespread economic impacts on the locality, which is not the instance in this case.

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The workforce would increase the demand for housing and accommodation in towns surrounding the project, given that peak workforce of 590 workers. The social impact assessment confirmed there was some availability in short term accommodation but that really the existing accommodation facilities would not be sufficient for project needs.

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So this is another occasion where Squadron has worked with Council and has reached an in principle agreement with Dubbo Regional Council to construct a temporary workers accommodation facility on land owned by Council and that's approximately 5 kilometres from Dubbo central business district. The Department's received confirmation from Council regarding this arrangement and that will be subject to separate assessment and approval.

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So where we have for other projects required an accommodation camp as part of the project, this solution has been developed in consultation with Dubbo Regional Council in order to develop that land within proximity to the site and is an arrangement that Dubbo was happy with and happy to do under a separate assessment and approval.

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So within the commitments noted in the EIS and the implementation of an accommodation and employment strategy, the Department considers the potential impacts on housing and short-term accommodation availability can be appropriately managed and would consider other state significant development projects in the area.

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In regard to the site inspection, the Department visited the site on two occasions. The Department inspected non-associated landowner properties, met with nearby landowners, visited public viewpoints and inspected the site access points. The Department also has consulted with EnergyCo and referred the project to EnergyCo for comment. They provided overall support for the project, noting it does not result in any impact to their capacity to coordinate investment in transmission, generation or storage within the Central-West Orana REZ.

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Just some quick comments on the recommended conditions. The Department's overall approach to conditions is to help achieve certainty and consistency between similar projects and to adopt an outcomes focused approach. The conditions are enforced by the Department's compliance branch, who do conduct site inspections, particularly during construction.

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There's a process of environmental audits conducted by an independent environmental auditor against the conditions of consent and those are made publicly available, including the Applicant's response to any issues that are raised.

And the project would also be regulated through an environment protection licence that's managed by the EPA.

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So the recommended conditions include several bespoke conditions, many which have been discussed in the above key issues but I will briefly address some of those residual conditions that haven't been captured. In response to the telecommunications authority comment, we've limited micrositing for two turbines to avoid potential intrusion to the microwave link in the area and that was in response to feedback from the National Parks and Wildlife Service that micrositing must be at least 200 metres away from the surveyed boundary of the Dapper Nature Reserve.

As the National Parks and Wildlife Service is the managing authority for that nature reserve, they've been included in consultation on a number of matters, including the BMP, the bird and bat adaptive management plan and the emergency plan, as I mentioned earlier. They will also be notified of the height and location of the final turbines. Next slide, please.

So in summary, the Department's undertaken a comprehensive assessment of the merits of the project. Electricity generating works are permissible with consent. The project's located in the Central-West region within the CWO REZ, that's an area that's been identified strategically as being strategically advantageous with a strong renewable energy resource potential and proximity to the electricity network.

The project's been sited to largely avoid key constraints, including avoiding better quality native vegetation, visual amenity and traffic impacts and impacts to cultural heritage sites. Any residual impacts the Department considers would be relatively minor and could be managed through the conditions of consent.

Importantly, the project would assist in transitioning the electricity sector from coal and gas fired power stations to low emissions sources and is consistent with New South Wales policy. It would generate over 2 million megawatt hours of clean electricity annually, which is enough to power around 370,000 homes and save over 2 million tons of greenhouse gas emissions per year.

The inclusion of a BESS enables the project to store energy for dispatch to the grid when the wind isn't blowing and increases grid stability and energy security. The Department considers the project achieves an appropriate balance between maximising the efficiency of the wind resource and minimising the potential impacts on surrounding land users and the environment. Through job creation and capital investment and the planning agreement with Councils, the project would also stimulate economic investment in renewable energy and provide flow on benefits to the local community.

So in conclusion, on balance the Department considers that the project is in the public interest and is approvable subject to the recommended conditions of

consent.

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**PROF MENZIES:** Okay. Thank you very much, Nicole. That was a compressive coverage of the assessment. Fellow Commissioners, have we got some more questions?

MS FITZGERALD: Yes, Neal. I wanted to go back to the issue of ecology, the box woodland and its characterisation as an SAII community. Nicole, I've read the Département's rationale for reaching the conclusions that you have. I also note that the BCS was still concerned about that aspect as recently as June. Have you had any further communications from them that might suggest they're more comfortable or they're going to take steps to verify their mapping or there's some sort of further information there?

MS BREWER: So in regard to box gum woodland, the impact of the project to box gum woodland would be offset through the normal offsetting mechanisms. Separately under the BC Act, there is consideration of serious and irreversible impacts. So there are a number of principles for considering serious and irreversible impacts.

MS FITZGERALD: Yes, I've read those. Yes.

**MS BREWER:** Yes. So I mean we would consider that that is in accordance with those principles, as to whether that would lead to a community becoming extinct would not be the case here.

### MS FITZGERALD: Sure.

- **MS BREWER:** But in addition to having the additional measures that are proposed, so that additional area of land, so the impacted area would already be offset as part of the project and through that offsetting process, that actually requires a ratio of some sort of up to three times.
- But the area that was proposed as an additional measure was discussed with BCS.

  They were originally concerned that I think the original proposal was just to address woodland, the impact to just the woodland component of the box gum woodland, and in subsequent information that Squadron provided, they offered that the area of the woodland as well as the native grassland would be covered by the measures.
  - **MS FITZGERALD:** Okay. So since June the BCS has become comfortable with the proposal for those offsetting stewardship agreements, et cetera? So they're now comfortable?
- 45 **MS BREWER:** So the additional measures are something that so the serious and irreversible under the Act is a consideration for the consent authority. I think they're probably I would say that there probably is a difference of opinion

around the extent to which an impact may cause extinction. So our view is that as we presented in the report and as I explained earlier.

So I think there probably is a slightly different view about whether that will cause extinction but those additional measures were discussed with BCS and they were added to through the process by Squadron to cover some of the concerns of BCS that the native grassland wasn't being addressed. And so overall we feel that that package of the additional measure that's proposed, the additional area, so they would secure that area under a BSA. They are likely to also be getting BSAs for their regular offsets, in inverted commas, but they will also be proposing additional BSAs for the box gum woodland.

MS FITZGERALD: Thanks, Nicole. That's my only other question, Neal.

MR WRIGHT: I've got one question, Neal, just on waste, Nicole. Reading through some of the documentation, I think Warrumbungle and Mid-West Councils are concerned about waste generation and disposal, concerned that the proponent's are underestimating the volume of waste likely to be generated too through construction and how that material might be either recycled or disposed of. Any comment on that?

MS BREWER: Look, I think we feel that we've addressed that through the outcomes based conditions, which require them to minimise the waste generated by the development and make sure that it's handled in accordance with that waste hierarchy. So it's an outcomes based condition that encourages that management of waste to be minimised and that it's removed from site as soon as possible and ensure that it's reused and disposed of to an appropriately licensed waste facility.

**PROF MENZIES:** Okay. I don't have any further questions but let me just check with the Commission staff. Kendall, anything that you need from us?

**MR KENDALL CLYDSDALE:** No, nothing specific other than, Nicole, if we could get a copy of your presentation, that would be fantastic.

35 **MS BREWER:** Yes, we'd be happy to provide that.

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**PROF MENZIES:** All right. Thank you, Nicole and thank you to your team. You should've used them more. A tour de force by you but the rest of them got to coast.

**MS BREWER:** They have been instrumental in the development of the assessment through the way, so they absolutely have been involved in the assessment.

45 **PROF MENZIES:** Of course. Thank you very much for your help today in providing answers to our questions. It really does help us to understand the context that we're looking at. So thank you very much.

MS BREWER: Thank you very much.

UNKNOWN SPEAKER: Thank you all.

UNKNOWN SPEAKER: Thanks, everyone.

>THE MEETING CONCLUDED