

## TRANSCRIPT OF MEETING

RE: VALLEY OF THE WINDS WIND FARM (SSD-10461)

## **DEPARTMENT MEETING**

PANEL: RICHARD PEARSON (CHAIR)

SARAH DINNING

SUELLEN FITZGERALD

OFFICE OF THE IPC: KENDALL CLYSDALE

**CALLUM FIRTH** 

**BRAD JAMES** 

STEVE BARRY

**DEPARTMENT OF** NICOLE BREWER

PLANNING, HOUSING

JESS WATSON AND INFRASTRUCTURE:

LOCATION: ZOOM VIDEOCONFERENCE

DATE: 9:30AM - 10:30AM

WEDNESDAY, 2<sup>nd</sup> APRIL 2025

## <THE MEETING COMMENCED

MR RICHARD PEARSON: Good morning, Department.

MS NICOLE BREWER: Morning.

MS JESS WATSON: Morning.

10 MR PEARSON: Morning. Is it just the two of you attending, Jessica and Nicole?

MS BREWER: Yes, that's right.

MS WATSON: Yes.

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MR PEARSON: Yes, okay, perfect. And you can hear and see us?

MS BREWER: Yes, I can. Can you hear and see us okay?

20 MR PEARSON: Well, I can't see Jessica, but we can certainly hear you, Nicole. Maybe your video is not turned on, Jessica, I'm not sure. That worked.

MS BREWER: Thanks, Jess.

25 MR PEARSON: We can see you and hear you. Great. So, let me just start with a brief introductory statement.

> So, before we begin, I would like to acknowledge that I am speaking to you today from Yuin country and acknowledge the traditional owners of all the lands from which we virtually meet today and pay my respects to their Elders past and present.

> So, welcome today to the meeting to discuss the Valley of the Winds Wind Farm (SSD-10461) currently before the Commission for determination. The Applicant, ACEN Australia, proposes to develop a 943-megawatt wind farm in the Central-West Orana Renewable Energy Zone within the Warrumbungle Shire local government area.

The project involves the development of up to 131 turbines, a 320-megawatt/640megawatt hour battery energy storage facility, connection to the proposed Central-40 West Orana Renewable Energy Zone transmission line and other ancillary infrastructure.

My name is Richard Pearson, and I am the Chair of this Commission Panel and I 45 am also joined by my fellow commissioners, Sarah Dinning and Suellen Fitzgerald. And from the Office of the Independent Planning Commission, we are joined today by Kendall Clydsdale, Callum Firth. We've also got Steve Barry and we've got Brad – sorry Brad, I've immediately forgotten your surname – Brad

James.

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MR BRAD JAMES: Yes, thanks, Richard. All good.

- MR PEARSON: Got there. Joining us today. So, in the interests of openness and transparency and to ensure the 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.
- The meeting is one part of the Commission's consideration of this matter and will form one of several sources of information upon which the Commission will base its determination. It's important for the commissioners to ask questions of attendees and to clarify issues whenever considered appropriate. If you're asked a question and not in a position to answer, please feel free to take the question on notice and provide additional information in writing which we will then put up on our website.
  - And so I request all members today to 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.

We'll now begin. We have got an agenda which we circulated prior to the meeting, which is before you, I'm sure. But if we go to the agenda – did you have a presentation you wanted to do, Department, or are you just going to run through the bullet points on the agenda?

**MS BREWER**: No, I do have a presentation.

MR PEARSON: Okay. So, we'll hand it over to you, Nicole.

MS BREWER: Thank you, Chair. Can everyone see the slides okay?

MR PEARSON: Yes, thank you.

- MS BREWER: Great. Thank you. So, good morning, my name is Nicole Brewer, I'm the Director for Energy Assessments at New South Wales Department of Planning, Housing and Infrastructure. And I'm joined here today by my colleague, Jess Watson, who's a Senior Environmental Assessment Officer.
- 40 Perhaps next slide. I am going to provide a brief overview of the key assessment issues, focusing on those in the Commission's agenda, and the key reasons for the Department's recommendation to the Commission to approve the project.
- Next slide please. So, firstly, the strategic context of the project relates to energy generation in New South Wales, because all the coal-fired power plants in New South Wales are scheduled for closure in the next 20 years. This project would assist in providing around 900 megawatts of large-scale renewable wind energy generation to meet that increased electricity demand and is consistent with those

policies to reduce emissions.

The project is within the declared Central-West Orana REZ and would connect to the approved REZ transmission line and also supporting infrastructure in the region such as road upgrades to support that renewable energy generation, including wind farms, would be coordinated through New South Wales Government through EnergyCo.

The Department also considers that the site's suitable for a wind farm and has a high wind resource, and that the area surrounding the project site is less densely populated and has neighbours with large landholdings, and that the project's consistent with the Wind Energy Guideline.

There would be flow-on benefits to the local community, including up to 400 construction jobs, \$24.8 million in contributions to Council, and broader benefits through the state through an injection of 1.68 billion in capital investment into the economy.

So, next slide please.

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**MR PEARSON**: Sorry, Nicole, I was just going to say are you okay to take questions as we go ...

MS BREWER: Of course.

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**MR PEARSON**: ... or do you want to ... Okay. Did you – I thought, Suellen, you had a question about the connection to the network, it might have been appropriate to address that on the previous slide?

MS SUELLEN FITZGERALD: Okay, thanks Richard. Yes. Nicole, I noticed in the documents that fairly late in the process, the southern transmission line connection through to the EnergyCo transmission has been deleted from the project. I was just wondering about what the rationale for that was, and whether it's been dealt with in some other process?

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MS BREWER: It has. So, thanks for the question. It has been dealt with through the approvals and assessment that was conducted for the Central West transmission line. So, that transmission line assessment covered the spine of the transmission line, but for that project, it also included the connections into the project. So, it was from that main spine up to the project.

So, that wasn't – the Central-West Orana transmission line wasn't – it was conceptualised, but it wasn't as far in the process when this project first was lodged. And then through the REZ being declared and that transmission line being developed and approved, that transmission line includes that connection to this project.

MS FITZGERALD: Thanks, Nicole. So, yes, it was a sort of a wishbone-shape

connection down to the main line, and so all of that is already approved as part of that other project. Thanks for that.

**MS BREWER**: Correct. If you're happy for me to move on to community and engagement?

MR PEARSON: Yes, sure, thank you.

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- MS BREWER: Thanks. So, the Department exhibited the EIS from the 23rd of May 2022 until the 20th of June 2022 and received 105 unique submissions, made up of 94 objections, 6 in support, and 5 comments. Sixty-three submissions were received from people that were located within 15 kilometres of the project site, and of those submissions, 55 objected to the project.
- So, the most common matters raised in public objections were landscape and visual, social and economic hazards including bushfire risk, biodiversity, cumulative impacts, and transport.
- The Department sought advice from 15 government agencies along with the host council, which in this case is Warrumbungle Shire Council, and Mid-Western Regional Council also provided comment. And the Department also visited the site on two occasions.
- Warrumbungle Shire Council did object to the project and the concerns it raised were regarding construction impacts, traffic and transport impacts, community contributions, social impacts, waste management, and water use as their main concerns.
- Next slide please. I'm now going to talk about what we consider to be the four key issues of the assessment, being energy transition, visual amenity, biodiversity, traffic and transport. And I'll also cover the others matter identified in the Commission's agenda.
- Next slide please. Regarding energy security. The Department considers that the project is consistent with the relevant policy documents which highlight the need to diversify energy generation mix and reduce that carbon emissions intensity. The project has a capacity of 943 megawatts and includes a battery which would enable the project to store energy for dispatch to grid when the wind isn't blowing or during periods of peak demand. And that serves to increase 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 that Central-West Orana REZ transmission project, and it's on land where wind development is permissible with consent.

**MR PEARSON**: Nicole, what's the implication of the EnergyCo designation as a foundation project; what does that actually mean?

MS BREWER: Thanks for the question, Richard. So, that – it has been part of the planning of this REZ really, and so that has served to mean that this project has been included in that transmission line approval process where the connection that I was talking about earlier. So, it's part – it has been considered as part of the planning and development of that transmission line and the development of the REZ more broadly.

MR PEARSON: Thank you.

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MS BREWER: So, in that strategic context, the Department considers the project is in the public interest and 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.

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Next slide please.

**MS FITZGERALD**: Nicole, if I could just on that topic and following on from that, Richard's question. Does that mean that ACEN has provided access fees to EnergyCo as part of this project?

MS BREWER: I think that is in process. So, I think part of the access and the payment of fees, that's probably a better question to direct to ACEN. But I understand that that's part of the process. I'm not sure whether that's been provided at this point in time, but I know that it is part of the process of them gaining access.

MS FITZGERALD: Great. Thanks, Nicole, we'll follow up with the Applicant.

MS BREWER: Okay. Thanks. On visual impacts. So, the Department visited the site and several non-associated receivers around the project to assess visual impacts. The Department assessed the project against the 2016 Wind Energy Guideline, including that visual assessment bulletin which forms part of the guideline. So, although the new energy policy framework was finalised in November 2024, it doesn't strictly apply to the assessment of this project.

But the Department did consider the approach prescribed in that technical supplement in regard to the visual magnitude in its assessment of the project, against those visual performance objectives that are in the 2016 guideline. So, those –

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**MR PEARSON**: Sorry, Nicole. Do you think that applying the 2024 guideline would have led to any different outcome in terms of visual impact significance or mitigation? Or do you just not know because the Department didn't apply it?

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MS BREWER: No, look, I mean, I think what the 2016 guideline did at the time that it was introduced was provide the objectives for the consideration of impacts for various visual zones. What that guide, I guess, didn't do was provide the how

you get to the outcome of what is considered a significant impact. And so we have looked at the project in the context of the newer guideline and we consider that the ... While we didn't apply the 2016 guideline and we've applied the methodology around those visual objectives, we've considered that approach around what is a significant impact in the 2024 guideline.

So, I would say that the two guidelines aren't inconsistent. What the 2024 guideline does is provide a, I guess, more detailed approach to getting to what might be considered a significant impact, which the 2016 guideline talked more broadly to if there is a significant impact to these are the outcomes that should be achieved.

## MR PEARSON: Thank you.

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MS BREWER: So, those performance objectives in the 2016 guideline that I talked about include that visual magnitude, the multiple wind turbine effects, the landscape scenic integrity, key feature disruption, shadow flicker, blade glint, and aviation hazard lighting. And it gives guidance on those performance objectives within certain distances, and in that 2016 guideline, that's known as the black and the blue line in the bulletin for that apply to the proposed height of a turbine.

So, the visual impacts for this project, we consider are less likely to be significant due to three key factors. The site selection and the number of surrounding receivers close to the site is the first, I guess, the first factor. There have been efforts from ACEN to resolve those issues through the project design.

So, prior to submitting the EIS, ACEN reduced the number of turbines from 175 to 148. And then after the EIS was lodged in response to community submissions and concerns, it reduced further the number of turbines to 131 turbines through an amendment. So, that in particular reduced the visual impact on the landscape and at some non-associated residences, particularly in and around Coolah.

And I guess the last factor was that ACEN had secured neighbour agreements with 22 additional landowners post EIS lodgement. So, that means that now the total number of associated receivers was increased from 22 to 59, and that includes 4 host landowners.

So, with the assessment for public viewpoints, there were 41 public viewpoints – that's roads and lookouts that were assessed in the EIS. And that concluded that while the project would become a visual feature in the landscape, it would be unlikely to significantly impact the values of that existing landscape, and the character of the area in the vicinity of the project would intact.

Overall, those views from those public viewpoints would benefit from distance, intervening topography and that existing vegetation, and there is undulating landforms which partially obstruct views of the turbines from the broader landscape. And the Department considers the project would not dominate the existing visual catchment. We also consider that those visual performance

objectives of the bulletin would be achieved at all those public viewpoint locations.

Moving onto the assessment of visual impacts from private receivers. The

Department categorised those receivers into four clusters, that you can see in the
different colours on the slide there. And so that's the northern cluster, the Black
Stump Way cluster, Leadville cluster, and the southeastern cluster. And so the
Department focused its assessment on the 87 non-associated residences within the
blue line, which is 4.95 kilometres, of the proposed nearest turbine, and 23 of
those are within 3.35 kilometres, which is the black line under the visual
assessment bulletin.

Most of the dwellings benefit from distance or intervening topography or screening from existing mature vegetation between the viewpoints and the project, as you'll be able to see in the next slides. But the Department's satisfied that that aligns with the visual bulletin and has recommended conditions requiring ACEN to provide vegetation screening for receivers within 4.95 kilometres if it's requested by a landowner.

In regard to aviation hazard lighting. The Civil Aviation Safety Authority, which is known as CASA, it advised that the project is considered a hazard to aviation safety and so it recommended that the wind farm is lit, and that 200-candler lighting would be appropriate, considering the location of the project. So, ACEN provided a lighting plan that accompanies the submissions report, which CASA reviewed and it raised no concerns.

The project is also partially located within 200 kilometres of the Siding Spring Observatory and therefore falls within the Dark Sky Region covered by the Dark Sky Planning Guideline. And the observatory requested that it be consulted throughout the installation of the aviation lighting.

So, the Department's recommended conditions requiring ACEN to install aviation hazard lighting in accordance with those CASA requirements and in consultation with the observatory, and in a manner that would minimise any adverse visual impacts.

MS FITZGERALD: Nicole, just on that night lighting for aviation. Can you confirm whether the recommended lighting from CASA is in the project or not? Because there was a little bit of uncertainty as to whether they were just consulting with them ongoing, but not perhaps putting that lighting in the proposal.

**MS BREWER**: The lighting is part of the proposal. So, they would – the conditions would require that they ...

45 **MS FITZGERALD**: Do it.

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MS BREWER: That they do it.

MS FITZGERALD: Yes, great, okay, so that got resolved, terrific. Thank you.

MS BREWER: Yes, it did, yes.

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- In regard to shadow flicker, the EIS confirmed that there wouldn't be any exceedances at non-associated receivers, but the Department also recommends conditions requiring them to ensure that that doesn't exceed 30 hours per annum, which is accordance with the guideline at any non-associated residence.
- The Department also assessed visual impacts from the ancillary infrastructure and considers that it would be unlikely to have a significant visual impact, given the location of that ancillary infrastructure away from non-associated receivers and the intervening topography and vegetation and ACEN's proposed landscape treatments and selection of those components to be of low visual contrast.
  - Next slide please. So, to give you a snapshot of the visual impact, we've included some slides of photo montages from locations that represent those four clusters that we considered in detail during our assessment.
- Firstly, the northern cluster of residences. There are 23 non-associated residences within 4.95 kilometres of a proposed turbine within the northern cluster. And again, most of those dwellings benefit from distance or topography or screening from existing vegetation between the viewpoints and the project.
- So, this slide shows an example wireframe and photo montage for residence R76. So, at this location there are two turbines within 3.35 kilometres and the closest of which is 3.15 kilometres. But given that distance and the intervening topography, you can see the rise of the land and there's existing vegetation, the Department considers that the visual performance objectives are met at this residence.
  - Next slide please. The Black Stump Way cluster traverses the centre of the project site and there are 10 non-associated residences in this cluster within 4.95 kilometres of a proposed turbine. And the EIS detailed those dwelling assessments and provided photo montages or wireframes and potential views.
  - This slide shows a wireframe for residence R277, which is 3.3 kilometres from the nearest turbine. And you can see that intervening topography or existing vegetation limits the views towards some of those turbines.
- The Department also considered the visual impacts to one residence, 502, where a dwelling doesn't currently exist. And it's understood that that former dwelling was destroyed in a bushfire and that landowner may rebuild in the future. The Department considered this in its assessment and considers a vegetation screening would be appropriate.
  - **MS FITZGERALD**: Nicole, while we're on this slide of 277. This was the residence that came out as having a high visual impact, and I assume, looking at that photo montage, it in part is because it will also be able to get views of the

Liverpool Ridge Wind Farm. Is that correct? Have you included the cumulative visual effect?

MS BREWER: We have considered the cumulative visual effect. I'd need to check the distance from that location from the Liverpool Range Wind Farm. The high visual impact, we consider, could be mitigated readily by vegetation screening at that location.

MS FITZGERALD: Yes, yes, yes. It looks like it, yes. Great. Thank you.

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MS BREWER: So, the visual assessment also identified other residences, 86, 90, 278 and 282, with potential views of turbines in more than 360-degree sectors and requested that ACEN provide those montages or wireframes overlaid with that representation vegetation. And that showed that the extent of the intervening vegetation and topographical features, the visual impacts to non-associated residences in this cluster would be limited.

And so, as I mentioned, that the conditions require ACEN to offer vegetation screening to all the receivers within 4.95 kilometres, if requested by the landowner.

Next slide please.

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**MR PEARSON**: Do you or ACEN have any – or we can ask the Applicant – feel for how many residents are likely to take up the screening offer? Has it been discussed with affected receivers that this option will be made available to them, or will they only find out about it through the conditions?

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MS BREWER: I can't speak to the conversations that ACEN's had. It is, I guess, a standard condition for wind farms that that visual screening and that screening is offered to receivers within the blue line. So, that is a common condition that we've had in our assessment and proposed conditions for some time now.

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When we were out on site, we had discussed with potential receivers that there was a range of mitigations, that there is potential to utilise, I guess. So, it was discussed broadly. I can't speak to the specific discussions that ACEN might have had.

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**MR PEARSON**: No, we'll talk to the Applicant about that. Thank you.

MS BREWER: Okay. So, the continuing on with views from the southwest of the project from receivers in the Leadville cluster. This includes residences that are within and surrounding the township of Leadville. So, there are 41 existing non-associated dwellings in this cluster that are within 4.95 kilometres of a turbine.

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The top wireframe shows the view from residences within the village and that shows the wireframe for residence 177, and that residence is 3.2 kilometres from the nearest turbine, and the views benefits, again, from distance and the

intervening topography.

ACEN also provided a wireframe with the representative vegetation for the residence R181 which is at the bottom the slide which is a little bit further away from the Leadville village and closer towards the turbines. And so the views towards the project from this residence and two neighbouring associated residences would be largely screened by that surrounding topography and existing vegetation. And so overall, the Department found that those visual magnitude objectives are met for the residences within this Leadville cluster.

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Next slide thanks. So, finally, the views from the southeastern cluster of the project, which is largely comprising low-density rural residences along Tongy Lane. One non-associated residence, 497, shown on the slide there, is located within 3.45 kilometres of a turbine to the west of Tongy Lane. And this slide shows that the wireframe overlaid with representative vegetation from LiDAR data for that residence. So, you can see from that slide, that the views towards the project would be limited by existing mature vegetation.

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There are a further 13 non-associated residences between 3.45 kilometres (or the black line) and 4.95 kilometres (the blue line) of a turbine. These residences would primarily have views towards a string of up to 10 turbines. But all of these residences we consider benefit from that distance, the topography, or screening from existing mature vegetation between the viewpoints and the project.

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So, in conclusion, the project, we consider, would meet the visual performance objectives described in the bulletin and wouldn't dominate the existing visual catchment. And that the recommended conditions require ACEN to offer that landscaping or vegetation screening to all non-associated receivers within 4.95 kilometres of a turbine, and implement reasonable and feasible measures to minimise the visual impact of the development.

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MR PEARSON: What's the visual impact from Coolah itself like, you know, the township? Is there anywhere in the EIS where that's discussed, or in the Assessment Report?

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MS BREWER: That would have been addressed in – I don't have a slide on that, I'm sorry – that would have been addressed in ACEN's EIS and landscape visual impact assessment. And we didn't consider that there were significant impacts from the township of Coolah.

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**MR PEARSON**: Is that due to distance or topography or ...?

MS BREWER: Both.

45 MR PEARSON: I presume distance primarily, would it be?

> MS BREWER: I'd say distance and topography, and intervening vegetation. I think that that kind of contextual picture of what this area looks like, all of those

three factors play into the project being able to meet the visual performance objectives.

MR PEARSON: Okay. Thank you.

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MS SARAH DINNING: If I may, just while we're on visual – the screening in particular. The option of whether the screening is close to the fence line in some of the photos versus further afield. Is that going to be taken into account? Maybe some people don't want the screening right at their back fence, so to speak, that they want it further in the landscape. Is that something for the Applicant?

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MS BREWER: I mean, the conditions do allow for that consultation with the landowner as to where that landscaping might be located. At the intent though, I would flag is that it is screening views from the residence. So, we do often hear from community around the consideration of impacts at, you know, at a fence line perhaps of the boundary of their property.

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But the guidelines as well as Land and Environment Court cases talk to the impact at the residence. So, that's what the condition is targeted towards, but it can be done in consultation with the landowner. But the primary objective is to reduce that impact from the residence.

MS DINNING: Thank you. Thanks, Chair.

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**MS BREWER**: So, now to transport. So, between the Port of Newcastle and the site, ACEN's proposing to use a common route from the Port of Newcastle, New England Highway, Hunter Expressway, back to the New England Highway, that's shown on this figure.

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And beyond that sort of common route, there are two transport routes. So, there's a common route onto the Golden Highway for access to the Girragulang cluster and the Leadville cluster, and that's from a new access point west of Moorefield Road and another new access point between Merotherie Road and Blue Springs Road for those two clusters. And for access to the Mount Hope cluster, which is in the northwest, it'll be via new access points off Black Stump Way.

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The high-load road route to be used by vehicles that are between 5.6 and 6.3 metres is shown in the yellow and grey on that figure, which would diverge from the standard route to bypass Denman.

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So, also in response to community concerns around the traffic impact to the Uarbry cluster of houses which is to the southeast of the project, ACEN removed the access road to the Girragulang cluster along Moorefield Road through the Uarbry village and replaced it with an alternative access route that was via the Golden Highway. The assessment had considered both options, but it removed that option through that Uarbry cluster of houses. And that option also reduced biodiversity ... Removing that option also reduced the biodiversity impacts.

MS FITZGERALD: Nicole, just on that. I notice that the introduction of that alternative route, does that mean that the upgrade of those little roads through the township – Short Street, Turee Street etc., etc., is no longer required?

MS BREWER: Correct. So, through the township of Uarbry, there was some concern from those receivers about the construction traffic travelling through that cluster of houses. And yes, so those upgrades are no longer proposed.

MS FITZGERALD: Are no longer proposed. Thank you.

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MS BREWER: So, the common route up to and including the intersection of the Golden Highway and Black Stump Way is covered by the Port to REZ project and EnergyCo is finalising the design and planning approvals for those works together with Transport for New South Wales, who's the relevant roads authority for those road upgrades.

So, I understand that the contract for construction is expected to be awarded shortly, with that construction scheduled to start later in 2025 to allow delivery of components sometime in 2026.

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So, the Department's recommended conditions require that all the approvals, including the Port to REZ project works, are completed prior to the use of those heavy vehicles requiring escort. Now, ACEN also are proposing to use a blade that is around 90 metres long and 6.3 metres wide tower bodies, so some of those loads are slightly larger than that envelope of the upgrades that are covered by the Port to REZ project. And potential impacts really come from those larger tower bodies which are the complex part of that transport, and they relate to some bridge clearances and overhead powerlines which are insufficient, so they're not high enough. At pinch points at Tarro Bridge, Averys Lane Bridge, and the Bridge Street Bridge on the New England Highway.

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So, EnergyCo advised that they've been working with Transport for New South Wales and ACEN to identify options for overcoming those height constraints, particularly in relation to those pinch points. The planning approval pathway will depend on the final solution that EnergyCo and Transport for New South Wales identify, and that planning approval pathway will depend ultimately on the entity responsible for undertaking those works. But if EnergyCo is responsible on the works are delivered by the Port to REZ contractor, the approvals pathway will be via Part 5.

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So, to cover that, the Department has recommended a condition that ACEN prepare a Transport Strategy so that they can demonstrate to the Department prior to those high-risk heavy vehicles that are greater than that envelope, that they can be accommodated by the road network and that all those relevant approvals pathways and the timing of approvals and upgrades are identified.

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And so to support that transport route for construction, a schedule of road upgrades is included in the recommended conditions, and ACEN needs to

undertake those road upgrades to the satisfaction of the relevant roads authority, either Council or Transport for New South Wales. They'll be required to repair any damage attributable to the development and to schedule those heavy vehicle movements to avoid peak hour traffic and prepare a comprehensive Traffic Management Plan.

Transport was one of the issues for Warrumbungle Council in its submission, and ACEN worked with Council to resolve that schedule of road upgrades.

MR PEARSON: Do you think, Nicole, the Council's going to be happy with the proposed conditions in relation to road upgrades?

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**MS BREWER**: Look, we feel that they would be. I know that ACEN worked quite closely with Council to have that schedule agreed with Council. And so that was, I guess, one of the things that was part of a recent amendment to the project, that they worked quite hard to have that agreement in that schedule.

So, it's my understanding that Council had signed off on that schedule of road upgrades through that consultation that ACEN had done directly with Council and Council's engineers.

MR PEARSON: We'll talk to Council about that as well. Thank you.

MS BREWER: So, the Department considers that the proposed transport routes could be appropriately upgraded to facilitate that transportation of the turbine components to site. And that the final road upgrades would be subject to detailed design and that the ... With the approval of the road asset manager or the relevant roads authority of that they would be upgraded as part of the works to facilitate the Renewable Energy Zone.

So, next slide please. So, ACEN's focused on avoidance of impacts through the avoidance of higher quality native vegetation and habitat during the design process for the project. The project is on land that's been heavily disturbed by agricultural activity, and it is characterised by predominantly cleared land. So, the areas of native vegetation do comprise 88% or approximately 650 hectares of the project footprint. Most of this though, around 78%, is the derived native grassland, and 22% is in the woodland condition.

So, the project would impact 299 hectares of threatened ecological communities, and that's around 295 hectares of the Box Gum Woodland and derived native grassland that is listed as critically endangered ecological community;
4.71 hectares of Inland Grey Box Gum Woodland is listed as an endangered ecological community under both the BC Act and EPBC Act.

So, the project in its design to avoid and minimise the impact on those threatened species and communities, it focused on avoiding impacts to the Box Gum Woodland CEEC, noting that the area of this community within the development corridor decreased by 31%. So, that went from 429 hectares in the EIS down to the

294 hectares in the amended project through that assessment process.

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So, while 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 proportion of the Box Gum Woodland present within New South Wales.

So, we've considered that total area of Box Gum Woodland using different measures of the current estimations of the extent of the community. And the impact of that 294 hectares would be between 0.004% and 0.11% of the total remaining area in New South Wales. And even considering that cumulative impact with other energy projects in the REZ, that impact would less than 1%.

- And so the Department considers that it would be very difficult to conclude that any impact in that range is likely to contribute significantly to the extinction of Box Gum Woodland. But we do acknowledge that a precautionary approach may be appropriate and had been advising applicants to seek nature positive outcomes that might help further protect that Box Gum Woodland community.
- So, ACEN's offered to securely conserve an area of Box Gum Woodland to sorry, to secure land comprising of 282 hectares for the purpose of protection and enhancement in perpetuity, and that's over and above the offset requirements for that community.
- MS FITZGERALD: Nicole, just on that topic. I couldn't see in the documents the response from BCS to that offer to preserve Tomahawk, I thought was the property under the Biodiversity Stewardship or Conservation Agreement. What was do you recall what BCS' response to that measure was? Are they satisfied?
- 30 **MS BREWER**: Yes. So, the conditions ... BCS has reviewed the conditions and is comfortable with that proposal from ACEN. The Tomahawk site, I guess, is one that ACEN is looking at, and that was part of, I guess, the discussions that it may be the Tomahawk site, or it may be another site. But that's the there is a requirement for an area of Box Gum Woodland to be protected over and above those offset requirements. But BCS did review the conditions and was comfortable with the conditions.

MS FITZGERALD: Thanks, Nicole.

- MS BREWER: So, regarding flora and fauna impacts. There were 16 threatened fauna species listed under the BC Act and 2 of which are also listed under the EPBC Act that were recorded within the site. There are species credits for 14 of those species that are listed on the BC Act and 6 are listed also under the EPBC Act.
  - Five of these species are known to experience direct impacts from construction, and ACEN did assume presence for the remaining nine species. So, potential impacts on these species would be offset via the credit offsets.

There were two bats that are listed as entities of serious and irreversible impact. That's the large-eared pied bat and the large bent-winged bat that were recorded on site. Some foraging habitat for the large-eared pied bat would be impacted as a result of the project, but no breeding habitat of either species would be impacted.

And as serious and irreversible impacts for these species are linked to the breeding habitat, which was not recorded within the project area, the project's not expected to have a serious and irreversible impact to those species.

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MR PEARSON: Is there a bit of a disagreement with BCS on the bat issue, Nicole? I thought, my reading of, I think it was the Department's Environmental Assessment Report, they – and look, I can't remember the detail, but there did appear to be some differing view about the impact of the project on bats.

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MS BREWER: So, there was some contention around how certain impacts were considered. And there was further information that was presented through the assessment process that BCS has reviewed.

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MR PEARSON: BCS has to sign off on the Biodiversity Management Plan. Is that a role for them?

MS BREWER: The Biodiversity Management Plan that's been recommended in the conditions is to be prepared in consultation with BCS.

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**MR PEARSON**: Okay. And for approval by the Planning Secretary?

MS BREWER: Correct.

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MR PEARSON: Okay. Thank you.

MS BREWER: So, in regard to bird and bat strike. The adopted approach in assessing bird and bat strike impacts for all wind farms in New South Wales is a combination of that risk assessment followed by post-determination adaptive management.

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

So, the Department considers that given that the bats that are listed as entities at risk of SAII on the basis to breeding habitat, and no breeding habitat would be impacted by the project, any potential for strike impacts wouldn't be a SAII and could be appropriately managed with the implementation of that bird and bat adaptive management plan, as required by the Department's recommended conditions.

And so the conditions also require ACEN to carry out that detailed monitoring of

the strike impacts and to have that adaptive management process.

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So, the biodiversity offsets the project and its impacts would generate approximately 6,300 ecosystem credits about 2,900 species credits. So, the recommended conditions require ACEN to retire those offset credits prior to carrying out any development that would directly or indirectly impact those values that require offset.

And overall, the Department considers that the biodiversity impacts of the project are acceptable and subject to implementation of the recommended conditions, and offsetting of the residual impacts of the biodiversity impacts of the project.

So, onto other matters that the Department considered during its assessment. In regard to aviation safety. So, one turbine, MH25, would affect the lowest safe altitude for one air route. So, Airservices advised during consultation that either a turbine would need to be below that maximum height, or that a proponent can make a request to arrange a commercial agreement to amend that air route to accommodate the wind farm.

- So, that advice led to ACEN actually deleting another turbine that was of concern, MH13, but for MH25, ACEN committed to arranging that commercial agreement to amend the route with Airservices prior to construction. And that was reflected in the conditions.
- The project is also located in proximity to two private airstrips, Tongy Aerodrome, which is 1.4 kilometres away, and the Turee Aerodrome, which is 2.4 kilometres away. And the impact on these aerodromes was also a key issue raised in submissions.
- So, there are no turbines or met masts that represent obstacles for take-off or landing at these aerodromes. And in light of the particular concern from the community on that issue, the Department engaged an aviation expert to review that information in ACEN's assessment. And that expert advice concluded that ACEN's assessment sufficiently address the potential risks and mitigation measures associated with wind turbulence and wind turbines as obstacles to these two aerodromes.
  - So, essentially, the wind data indicates that the sort of easterly and southeasterly winds are the dominant ones, so that's 70% of the time. And under those winds, there wouldn't be any turbulence impacts that would be experienced by either airstrip. So, the dominant winds don't create turbulence impacts to those airstrips.

There are westerly winds which occur 20% of the time, which could result in light turbulence from six of the turbines being experienced by aircraft operating at that western edge of a standard circuit area. Light turbulence is something obviously that's common, and a common constraint that pilots have to navigate, and it was considered by the expert that that's manageable for the aircraft activities undertaken at those airstrips.

So, the Department also recommended a condition requiring ACEN to develop an Aviation Management Plan in consultation with those two aerodrome operators and including procedures to ensure safe operation of those aerodrome runways, and mitigation measures for the management of impacts and hazards.

In regard to bushfire. So, a large proportion of the project site is mapped as bushfire prone land. ACEN would be required to establish and maintain a 10-metre asset protection zone at the turbines and monitoring masts, and the compound for the operation of the maintenance facilities, and including substations, would be in accordance with the Rural Fire Service Planning for Bushfire Protection 2019. ACEN would also be required to prepare a Bushfire Management Plan and Emergency Response Plan to manage those risks.

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- ACEN also committed to the development and distribution of operational guidelines regarding those sort of water-bombing setbacks from turbines to the fire authorities and the provisions of water supplies during construction for firefighting.
- So, in response to the community concerns about the potential impacts of the project to safety, and to the practicality of aerial firefighting, the Department's recommended a condition requiring ACEN to detail those operating procedures in the event of a bushfire in its Emergency Plan. And this would include measures such as shutting down the turbines or positioning blades in a manner to minimise interference with aerial firefighting operations.

Bushfire was a particular concern, I guess, of this community because in fairly recent history, I think it was 2017, there was a bushfire through the area. So, that was the substance of quite a lot of the submissions. But the Department has addressed that through the Emergency Plan procedures that would be developed as part of the project.

MR PEARSON: So, just on that, Nicole, I notice you have a condition which requires all of these management plans to be published, but it specifically says not the Emergency Plan. And there was another one, not the Emergency Plan, and – yes, there was another one that wasn't going to be published. What's the reason behind that?

MS BREWER: Sometimes there are requirements in the Emergency Plan that ...

**MR PEARSON**: I'm referring to condition ...

MS BREWER: Yes, I'm just looking at ...

MR PEARSON: ... C15. This is the Fire Safety Study and Emergency Management Plan aren't published. And if you've got a community that's concerned about bushfire, why would you not make ...

**MS BREWER**: So, the requirements – oh, sorry.

MR PEARSON: No, no, you go on.

5 **MS BREWER**: All right. The Fire Safety Study and the Emergency Plan contain information that the fire authorities have recommended isn't published, and so that is an approach that we've taken to be more specific in the conditions around that.

MR PEARSON: Yes, I just find it a bit odd that you wouldn't be letting the community know what's going to happen in the event of a bushfire, essentially, if it's one of their key concerns with the project. I don't really understand why those things need to be secret. You're saying it's on advice from the relevant authorities. I'm just wondering what's in those plans that the community shouldn't know about? Do you know what I mean?

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MS BREWER: Yes.

MR PEARSON: Like, wherever possible, I think to be transparent is important.

MS BREWER: Look, I mean, I'm happy to discuss that further, I guess, in the conditions, you know, in the conditions discussion?

MR PEARSON: Yes, when we come to that point, yes.

25 **MS BREWER**: Yes.

**MR PEARSON**: Just flag that for now.

MS BREWER: Yes, okay, noted. So, regarding quarrying and accommodation facilities. There are three on site quarries that are proposed for the extraction of construction material, and that's for access tracks and hardstands. A total of up to 548,000 tonnes of material would be extracted.

So, no significant groundwater interactions are expected during those quarrying activities. And noise is predicted to be below the noise affected management level for the non-associated receivers.

The air-blast overpressure and estimated ground vibration levels at all non-associated receivers would be below the criteria, given that the separation distances are larger than 2 kilometres at all non-associated receiver locations.

So, ACEN's committed to developing and implementing a rehab management plan to ensure that those sites are rehabilitated to a condition fit for the intended land use and are commensurate with the surrounding landscape. And the Department also recommended a condition requiring the rehab of the quarry sites as soon as practicable after those quarrying activities finish.

So, the project construction workforce would increase the demand for housing and

accommodation in towns surrounding the project, noting that the project is expected to have a peak construction workforce of 400. So, a workforce accommodation camp is proposed to be located on Moorefield Road, and the Department considers that that camp is required to appropriately manage impacts on housing in that short-term accommodation availability, and we've included a condition to this effect.

ACEN has also committed to providing the appropriate health and welfare services for the occupants of that camp, including onsite nursing practitioners, telehealth and first aid training.

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So, in regard to water resources. The amount of water required for the project is estimated to be around 1,000 megalitres of water for construction of the wind farm plus additional requirements for crushing operations at the quarries. And this includes water for dust suppression and concrete production, firefighting, and the amenities.

So, the water is proposed to be obtained from multiple sources, including farm dams under agreement with the relevant landholders, groundwater purchase from associated or adjacent landowners, or Council, and purchasing and transporting water to site by tanker, and treated wastewater.

So, ACEN's also been in discussions with local landowners who have indicated that availability of approximately 785 megalitres per annum that could be made available during construction, subject to those relevant approvals.

So, water required during operation is limited just to the amenities usage and expected to be minimal. ACEN proposed to source the operational water supply from onsite water rain tanks and by purchasing and transporting water to site.

Given the depth to groundwater which at this location is expected to be 10 metres below ground level or more than that, the impact on groundwater levels, the quantity or quality from the project is expected to be negligible. And although unlikely, should that construction of project infrastructure occur in areas with shallow groundwater, further hydrogeological assessment will be undertaken in accordance with the relevant guidelines, and a water access licence with sufficient entitlement to account for the groundwater take would be obtained. In addition, if this were to occur, there would be a dewatering protocol.

So, the project site is not within an area of flood prone land, and so the project infrastructure isn't expected to be subject to flooding.

Next slide please. In regard to cumulative impacts. The Department is undertaking cumulative impact studies for the Central-West Orana REZ, and these studies identify ways for government to support those host communities by identifying specific actions and plans that can be implemented to alleviate the potential pressures of the cumulative impacts on local and regional infrastructure and services.

So, these address issues like the housing and workforce accommodation, social infrastructure and services, and water security and waste management. Those studies are currently being finalised and they'll set an agreed baseline and projections of those cumulative impacts which will then be used by the relevant agencies and councils to develop those sort of responses and solutions.

ACEN's proposing that temporary workers accommodation camp to facilitate that project and therefore that wouldn't compete with other projects for a draw on accommodation.

The traffic assessment did include a cumulative impact to the adjacent approved developments that do use the common traffic routes, and that includes Liverpool Range Wind Farm, the Uungula Wind Farm, Wollar, Stubbo, and Dunedoo solar farms.

The traffic modelling indicates – oh sorry, yes.

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MR PEARSON: Sorry, Nicole, I was just ... So, what happens if those cumulative impact studies identify a need for specific projects to contribute towards resolving these issues and they already have their approvals? For example, you know, this project is going to generate impacts that some of which, many of which we're obviously addressing through the project approval. But it could be, could it not that there would be a requirement for them to other things at a regional scale. Is that being envisaged, or is this all going to be dealt with on budget allocation by agencies?

MS BREWER: I think that's something that the agencies are working through at the moment, to work out what those solutions might be and how they might be funded.

MR PEARSON: Okay. And do you have an idea on the timing of this work?

MS BREWER: I understand that those studies are being finalised at the moment.

So, I think that those studies, I understand, will become available in the kind of – in the short term. I don't have an exact date though, I'm sorry.

MR PEARSON: That's okay. Thank you.

- MS BREWER: So, there's also the traffic modelling indicates that the Golden Highway has sufficient capacity to accommodate that construction and operational traffic associated with the project, as well as the potential cumulative impacts if there was concurrent construction with those surrounding state significant projects.
- The next slide please. On decommissioning. So, it's New South Wales Government policy that financial assurances should not be required by the conditions of consent and any financial assurances would be dealt with in those commercial arrangements outside the planning system. And that's through the

agreements with the host landowners, to have those arrangements for decommissioning and rehabilitation of infrastructure.

And the Department's provided guidance on how those host landowners

agreements should consider that, you know, refurbishment, decommissioning and rehabilitation in the Wind Energy Framework's Negotiated Agreement Advice.

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The infrastructure would be decommissioned either at the end of the project life or if the project's not operating for more than a year, and the site appropriately rehabilitated to those defined outcomes in the recommended conditions. And if an applicant or landholder fails to meet the decommissioning or rehab obligations under the consent, the Department can use its enforcement powers to address any breaches of those consent conditions.

- Overall, so the recommended conditions are to help achieve certainty and consistency between projects and to adopt an outcome-focused approach. They're enforced by the Department's Compliance Branch and they conduct site inspections, particularly during construction for these types of projects.
- There's also a process of environmental audits that are conducted by an independent environmental auditor against the conditions of consent, and they're also publicly reported. And there's also the Environment Protection Licence which is managed by the EPA.
- So, the recommended conditions include several bespoke conditions, many of which we've discussed in the above key issues. With limited micro-siting for turbines for the 250 metres from the battery storage, so that it's outside the blade-throw zone, and 200 metres from cliff lines to avoid that microbat breeding habitat.

We also included a condition around the APT pipeline recommendations to prepare an electrical hazard study in accordance with the relevant standards for any construction near or over the Central Ranges high-pressure gas pipeline. That runs parallel to Black Stump Way.

And the Department also recommended a condition requiring the development of that Accommodation Camp Management Plan in consultation with the Western New Souith Wales Local Health District and Council.

So, in summary, the Department has undertaken a comprehensive assessment of the merits of the project. The project's located in the Central-West Region within the Central-West REZ. It's an area identified as strategically advantageous with strong renewable energy resource potential, proximity to the network, and consideration of interactions with those existing land uses.

The project has been designed and amended through the assessment process in response to those concerns, including reducing the number of turbines from 148 to 131, and removing the transport route options that we discussed earlier.

Importantly, the project assist in transitioning the electricity sector and the BESS would allow the project to store energy for dispatch to the grid when the wind isn't blowing and/or during periods of peak demand. And that increases the grid stability and energy security.

The Department considers that the project achieves an appropriate balance between maximising that efficiency of the wind resource and minimising the potential impacts on surrounding land users and the environment. There would be job creation and capital investment and a planning agreement with Council, and that would stimulate economic investment in renewable energy and provide some flow-on benefits to the local community.

And so on balance, the Department considers that the project is in the public interest and is approvable, subject to those recommended conditions of consent.

**MR PEARSON**: Great. Thanks, Nicole. I think we've – so, we're pretty much out of time. I think we've covered all the items on our agenda, having just looked back through it. But are there any final questions for the Department, Suellen?

MS FITZGERALD: No, Richard, I'm good.

MR PEARSON: Yes. And anyone else?

25 **MS DINNING**: No, thanks Richard.

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**MR PEARSON**: Representatives of the Office, anything that you wanted to raise? I don't think we took anything on notice. Perhaps the only other thing I recall is something about the cumulative visual impact with the Liverpool Range Wind Farm. But I don't know – do we take that on notice?

**MR JAMES**: Richard, do you want the staff here to have a look into that and if there's any questions, we can ...

MR PEARSON: I think that'll be good just to ... I think it was in relation particularly to receiver R277. Maybe that's something you could have a look at. Sarah, was there anything final from you?

MS DINNING: No, thank you. Thank you.

**MR PEARSON**: Okay. All right. Well, thanks very much, Nicole and Jessica for attending and answering our questions. We'll have further discussion down the line. The public meeting is next Thursday, and I guess you will attend remotely, is that the way you – yes, okay. It's important just to keep an eye on proceedings so that you're able to respond to key issues that are raised.

And we'll let – staff will liaise with you during the day in any case to make sure that you're aware of the key issues that are being raised. So, thank you very much,

Nicole and Jessica, and we'll talk further down the line.

MS BREWER: Thank you very much, commissioners.

5 **MR PEARSON**: Thank you.

MS WATSON: Thanks everyone. Bye.

MR PEARSON: Bye. Okay –

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