

New South Wales Government Independent Planning Commission

TRANSCRIPT OF MEETING

RE: BIRRIWA SOLAR FARM (SSD-29508870)

FINAL PUBLIC MEETING

PANEL:	MS JANETT MILLIGAN (CHAIR)
	MR DUNCAN MARSHALL AM
	MS SUELLEN FITZGERALD
SPEAKERS:	IWAN DAVIES
	CEDRIC BERGE
	SARAH HAFEZ
	AMBROSE DOOLAN
	RICK CAMPBELL
	SALLY EDWARDS
	KEVIN LOUGHREY
	MARGARET ARMSTRONG
	BILL STINSON
	JULEEN YOUNG
	AMANDA BOWMAN
	DENNIS ARMSTRONG
	RICK COLESS
	HENRY ARMSTRONG
	RAMILA CHANISHEFF
	LOU ARMSTRONG
	ANGUS STUART
	EMMA BOWMAN
	CAROLYN EMMS
	LYNETTE LABLACK
	GRANT PIPER
LOCATION:	DUNEDOO JUBILEE MEMORIAL HALL,
	154 BOLARO ST, DUNEDOO NSW 2844
DATE:	10:00AM - 2:25PM
	WEDNESDAY, 5 TH JUNE 2024

<THE MEETING COMMENCED

MS JANETT MILLIGAN: To the Independent Planning Commission's public meeting into the state significant development application for the Birriwa Solar
 Farm. I'm speaking to from Wiradjuri country and I acknowledge the traditional owners of all the countries from which we meet today. I pay my respects to their elders, past and present, and also to elders from other communities who may be participating today.

- 10 I'm Janett Milligan, I'm the share of the panel for this case and joining me are my fellow commissioners, Duncan Marshall and Suellen Fitzgerald. No conflicts of interests have been identified in relation to our determination of this development application.
- We have a limited and specific role at the end of the planning process. We decide if an application should go ahead and if so, on what conditions. We consider the Department's assessment report and the application, your written and oral submissions and other materials that the planning law requires us to consider. All of these materials are either already publicly available or will be made available on our website.

In making a decision on this case, the Commission must obey all relevant laws and consider all applicable policies and the public interest. We're also obliged to consider public submissions and that's the purpose of today. We want to hear what you think about the merits of this application. This is not a forum for submissions on whether you like or approve of the applicant, the laws we must obey or the policies we must consider.

You will have all been sent some guidance from the Commission about expected conduct at this public meeting and if we consider that guidance isn't being followed, we can remind you of what's expected and if necessary, direct you to end your submission and provide the rest of your submission to us in writing. If we do that, you'll need to comply promptly so that we can hear from your fellow community members as well.

The application has already been assessed by the Department on our behalf. Many of you may have already participated in the Department's processes and we thank you for your participation. There's no need to repeat your previous submissions. They're all available to us for our consideration. The applicant and the Department have considered your submissions and taken them into account in the application and assessment and recommended conditions that we're considering today.

So today we want to hear your response to the Department's assessment, recommendation and to the recommended conditions. Even if your submission to us today objects to the application being approved at all, we encourage you to tell us whether any of your concerns could be addressed, either wholly or in part, by the imposition of conditions. Your consideration of alternatives does not in any way compromise your submission and it enables the panel to consider all options.

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We will first hear from the Department of Planning, Housing and Infrastructure on the findings of its whole of government assessment of the application currently before the Commission. We will hear from the applicant second and then we'll proceed to hear from our registered speakers. While we will endeavour to stick to our published schedule, this will be dependent on registered speakers being ready to present at the allocated time. I'll introduce each speaker when it's their turn to present to the panel. Everyone's been advised in advance how long they have to speak.

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So a bell will sound when a speaker has one minute remaining and a second bell will sound when a speaker's time has expired. To ensure that everybody receives their fair share of time, I'll enforce the timekeeping rules. Extensions may be granted on a case by case basis by me, as panel chair, however in the interest of fairness to other registered speakers, an extension may not be granted.

If you have a copy of your speaking notes or any additional material to support your presentation, it would be appreciated if you will provide a copy to the Commission. But please note, any information given to the Commission may be made public. The Commission's privacy statement governs its approach to managing your information and it's available on the Commission's website.

Just lastly, a little housekeeping, exits from the venue in the case of an emergency are located on the left-hand side of the hall and the toilets are located at the front of the hall.

So now it's time to begin and let me call our first speaker, who is Iwan Davies, from the Department of Planning, Housing and Infrastructure. So Mr Davies, thank you.

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MR IWAN DAVIES: Thank you, Chair. Good morning. My name is Iwan Davies, Director Energy Assessments at the New South Wales Department of Planning, Housing and Infrastructure. I would also like to acknowledge the traditional custodians of the land on which we join today's meeting. I would like to pay my respects to their elders, past and present, and extend that respect to any Aboriginal and Torres Strait Islander people here today. Next slide, please.

The Birriwa Solar Farm is a state significant development and has been assessed under the Environmental Planning and Assessment Act, which is the planning
 legislation under which all developments in New South Wales are assessed. The Department has undertaken a comprehensive whole of government assessment of the application by including key agencies and the local councils in preparing its assessment, including Mid-Western and Warrumbungle Councils, RFS, Fire and Rescue New South Wales, the Biodiversity, Heritage, Agriculture, Fisheries and Natural Resources divisions, EPA and Transport for New South Wales.

I will identify to the Commission what the Department believes were the key assessment issues and the reason it considers the project is approvable against the

relevant legislation and policies. Next slide, please.

The project is a permissible land use with consent under the relevant legislation. Noting that all coal fired powerplants in New South Wales are scheduled to close in the next 20 years, the project would assist in providing large scale renewable energy generation to meet increased electricity demand, several national and state policies, aiming to achieve net zero emissions in New South Wales by 2050 and reduce emissions by 70% below 2005 levels by 2035. The project is consistent with the relevant national, state and local policies, which identify the need to diversity the energy generation mix and reduce the carbon emissions intensity of the grid, while providing energy security and reliability. Next slide, please.

Guys, can I just flag, I think it's the old slides that we are sharing. New slides were sent through yesterday afternoon. But I'm happy to continue. Regarding the
regional context, there are additional considerations from a regional and local context that the project site would benefit from. The site is located within the Central-West Orana Renewable Energy Zone, which has been identified as an area which should be targeted for renewable energy investments.

20 The site is located in a sparsely populated area. The site has good transport links and grid connection, being near the Castlereagh Highway, with direct access to the electricity network. There are minimal biodiversity and heritage impacts. The site is primarily used for grazing and not mapped as BSAL land. Overall, the Department considers the site appropriate for the project.

The project would also provide flow on benefits, including up to 500 construction jobs and a VPA with council equating to 1.5% of the project's capital expenditure, which both Mid-Western and Warrumbungle Councils support. There would be broader benefits to the state, through an injection of approximately \$1 billion in capital investment into the New South Wales economy. Next slide, please, or you can stay on this slide because it's engagement.

The Department exhibited the EIS and amendment report and received 85 and 45 objections respectively. The most common matters raised in public objections were land use compatibility, visual amenity and cumulative impacts. Throughout the assessment process, the Department sought advice from 13 government agencies, in addition to Mid-Western and Warrumbungle Councils. Next slide, please. And perhaps one further. Thank you.

40 The project has a capacity of 600 megawatts, which could generate enough energy to power about 230,000 homes. The project would play an important role in increasing renewable energy generation and capacity and contributing to the transition to a cleaner energy system as coal-fired generators retire. Next slide, please.

The project is a permissible land use with consent under the relevant legislation. It is consistent with local and regional plans, including the Mid-Western and Warrumbungle LEPs and the Central West and Orana Regional Plan. The site is

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primarily used for grazing and the Department has included a condition requiring grazing to be maintained on the site where practicable. The development footprint does not include BSAL, is comprised of class 5 and 7 land and would represent 0.01% of the 8.9 million hectares of land currently used for agricultural output in the Central West Orana region.

Regarding cumulative impacts, the amount of agricultural land that would be occupied by solar farms in the region would be less than 0.18%. The land could be returned to agricultural land following decommissioning of the project. Neither council or DPI Agriculture raised concerns that the project would compromise the long-term use of the land for agricultural purposes. Next slide, please.

The haulage route for the project is via the Castlereagh Highway, Barneys Reef Road and Birriwa Bus Route South. Access would be at the western side of the project. The community raised concern about the use of Birriwa Bus Route North and Merotherie Road. The Department has prohibited use of these roads in the recommended conditions.

Access to the accommodation camp would be through the site, to avoid the use of Birriwa Bus Route North and Merotherie Road and the camp would reduce the number of light vehicles during peak construction from 360 to 50 per days. The intersection of the Castlereagh Highway and Barneys Reef Road would be upgraded.

Barneys Reef Road and Birriwa Bus Route South to the site access point would be sealed and widened, which the Department has included conditions requiring the applicant to maintain at all phases of the development. The local and state road authorities agreed with the proposed road upgrades and the project would not have any significant impacts on road network capacity, efficiency or safety. Next slide, please.

The Department visited the site and nearby non-associated residences to verify the visual impacts and to further understand residents' concerns. The Department recognises that the introduction of the solar farm to a rural setting would result in a change to the local landscape but considers the development would have a limited impact beyond the project's immediate vicinity. The applicant has incorporated a number of measures to minimise visual impacts, including setbacks from the project boundary to surrounding receivers, including residents R3, minimising clearing of existing vegetation and planting new vegetation.

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Views of the project from the Castlereagh Highway would be minimal as it is screened by existing vegetation. There are a total of 22 non-associated residences within 2 km of the site, all of which assessment concluded would experience low, very low or no visual impacts. Despite this, the Department has included conditions requiring the landscape screening identified in the EIS to be implemented, land management measurements and requirements to minimise night lighting. Next slide, please. The applicant proposed an accommodation camp through the amendment report to address potential impacts on accommodation availability in the area. The applicant has demonstrated means of servicing the camp in relation to water, sewage, waste, electricity, security and medical services. The camp would be accessed via the main site access point to avoid other local roads and is located in an area away from residences, resulting in minimal visual and noise impacts.

The Department has recommended strict operating conditions for the camp, including fire, emergency and dust and an accommodation camp management plan to be developed in consultation with Mid-Western and Warrumbungle Councils, including ensuring that all utilities are designed in accordance with council specifications.

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The Department is satisfied that the accommodation camp provides a suitable means of mitigating potential increased demand for housing in the region, noting that council supported onsite accommodation for this project. Next slide, please.

The Department has considered the potential cumulative impacts of all of the nearby projects. The key cumulative impacts considered were agricultural land, traffic, visual and accommodation. The Department is satisfied that the project will not result in significant cumulative impacts. Next slide, please.

The operational life for the project would be about 40 years but it could yet operate for longer if solar panels are upgraded over time. The Department considers that the project would be suitably decommissioned and rehabilitated with the implementation of objective based conditions including that infrastructure, including underground infrastructure, must be removed if operations cease, the land must be rehabilitated and restored to pre-existing use and the owner or operator of the project should be responsible for decommissioning and rehabilitation. The Department has also recommended a condition requiring the accommodation camp to be decommissioned within 12 months of operation of the solar farm.

Regarding decommissioning bonds, it is the New South Wales government's policy that financial assurances should not be required by conditions of consent and any financial assurances should be dealt with in commercial arrangements outside of the planning system. Next slide, please.

The Department also conducted a detailed assessment of the matters listed in this slide in consultation with the relevant agencies, including on biodiversity, heritage and fire and concluded that there would be no significant impacts. Next slide, please.

In summary, electricity generating works on the site are permissible. The overall agricultural productivity of the region would not be significantly reduced. The site has good solar resources, direct access to the road network and the electricity network. The project has been designed to largely avoid site constraints, including nearby non-associated receivers, high quality agricultural land, water courses, native vegetation and Aboriginal heritage sites.

The project would assist in transitioning the electricity sector to low emission sources, consistent with New South Wales policy. It could power about 230,000 homes and has energy storage to dispatch to the grid when needed. The project achieves an appropriate balance between maximising the efficiency of the solar resource and minimising the potential impacts on surrounding land users and the environment. Through job creation and capital investment and a planning agreement with the councils, the project would also stimulate economic investment and provide flow on benefits.

> On balance, the Department considers that the project is in the public interest and is approvable, subject to the recommended conditions. Thank you.

MS MILLIGAN: Could I ask one question, please? We understand from discussions with council, there have been reasonably recent discussions about the disposal of waste outside the immediate local government areas. So one question about the traffic study and whether in fact the plan to dispose of waste, as I understand it, outside the two local government areas directly involved was
 considered? So the impact on the transport study, roads and traffic of the recent discussions about waste disposal.

MR DAVIES: Thank you. My understanding is that all vehicle movements for the development, including the disposal of waste, were assessed by the applicant and that those numbers are included in the conditions of consent and that all relevant road upgrades that are required for those numbers are included in the conditions. Happy to be corrected if you've heard anything different recently.

MS MILLIGAN: Thank you. Thank you. We have no other questions at this point.

MR DAVIES: Thank you.

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MS MILLIGAN: So let's move on. Our second speaker this morning, our second speakers, we have Mr Cedric Berge and Ms Sarah Hafez from ACEN Australia, the proponent of the project.

MR CEDRIC BERGE: Good morning, everyone. Good morning,
 Commissioners and members of the community. My name is Cedric Berge. I've
 been the project development manager for the Birriwa project since the beginning.
 I've been working with ACEN for about five years and we've got this presentation for you this morning.

Before we start, I would also like to acknowledge the Wiradjuri people, who are the traditional custodians of the land on which the Birriwa Solar and Battery Project is proposed to be located. We acknowledge the resilience and the knowledge of the traditional custodians of this nation. We pay our respects to elders, past and present, the many Aboriginal people that did not make that elder status and to those that continue to care for country. Next slide, please. Next slide, please.

ACEN Australia is the platform representing ACEN's renewable energy assets in
 Australia. With more than 1 gigawatt capacity of large scale renewable energy generation in construction and in operations and more than 13 gigawatt capacity in development pipeline, our portfolio includes solar, wind, battery and pump hydro projects across the country. Just to give a couple of examples, our New England Solar in the Uralla region is ACEN Australia's first operational project and the
 Stubbo Solar in the Central-West region is our second project, currently under construction.

We also have several projects located in the Central-West region, including the Valley of the Winds project, the Aquila Wind project, the Narragamba Solar and the Phoenix Pump Hydro. Next slide, please.

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To begin, I would like to note that we believe that the Department's assessment report accurately reflects and summarises our proposal and the outcomes of all the assessments carried out as part of our EIS, our amendment report and our subsequent assessment documents. ACEN Australia is satisfied with the Department's recommended condition of consent and thank the Department for their assistance during the project's development and consultation stages. Next slide, please.

ACEN Australia has been developing a 600 megawatt solar project with a 600 megawatt and two hour battery energy storage system, a BESS, along with a workers' accommodation facility and local road upgrades. The project is located between the town of Dunedoo and Gulgong in the Mid-Western regional LGA and in the Central-West region of New South Wales.
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The project has been part of EnergyCo's Candidate Foundation Generator, the CFG process, since May 2022. This process allows projects aiming to connect to the REZ to discuss issues such as community impacts, community consultation, accommodation, access right as well as grid studies. The project would involve up to 500 jobs during peak of the construction and we will discuss this further in the workers' accommodation slide. We have a commitment to employ and buy local where practical. Next slide, please.

So ACEN started discussions with the local landholders in 2019 and 2020. We
lodged a scoping report in 2021, as we can see on the slide, and then we worked on EIS, response to submission reports, amendment report throughout 2022 and 2023. Public exhibitions were held in October and November 2022 and then a second public exhibition was held in October 2023. The project was referred to the IPC in May 2024. I would like to note here that as far as I am aware the Birriwa
project is the first renewable project connecting to the Central-West Orana REZ to go through the Independent Planning Commission process. Next slide, please.

The project we're looking at has the potential to meet the need for replacement

power as old coal fired generators shut down. It aligns with key strategic plans and policies in the Commonwealth, state and regional and local levels, especially the New South Wales electricity infrastructure roadmap. One important aspect of the project is the BESS or the battery energy storage system, which will help improve grid stability and energy security. The project is also located next to the Merotherie Energy Hub, which is a key part of the Central-West Orana REZ infrastructure.

The development footprint covers about 1,197 hectares, mostly cleared land, currently used for sheep and cattle grazing as well as dry land cropping. It is anticipated that grazing will continue on site along with weed management and ground cover maintenance. We are keen to expand on our success of our solar grazing at the site as well as we have recently welcomed 6,000 merinos to graze in the arrays of our New England solar project.

Construction will take around 28 months with staging of the solar and the BESS components to avoid overlapping of the construction peaks. The proposed access route from the Port of Newcastle uses the Golden Highway and then south on to the Castlereagh Highway and then the local roads such as Barneys Reef Road and Birriwa Bus Route South.

All the construction traffic, including traffic of workers accessing the workers' accommodation facility, will access the site via the proposed route through the only site access point off Birriwa Bus Route South on the western side of the development footprint. We do not propose construction and operation traffic outside of this route. Access between the laydown area near the site access point and the workers' accommodation facility will be on internal tracks only with the exception of a couple of public road crossings designed to safely connect the various clusters of the solar project.

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During construction, the proposed upgrades along Birriwa Bus Route South will impact the Central-West cycle trail, so if feasible, the portion of the Central-West cycle trail within the study area will be safely separated on to an approximately 2 metre dust lane in accordance with relevant cycling guidelines and standards and in consultation with the Central-West cycle trail organising committee. A detailed traffic management plan will be prepared prior to construction commencing to ensure that any impacts on local traffic and local landholders are addressed.

The proposal also includes a workers' accommodation facility for up to 500 40 workers and on the next slide, please, there's a bit more information. Next slide, please. Sorry, the one before. Thank you. So one of the key issues raised in the EIS submissions was the ability for the local area to accommodate the incoming workforce required to service the project. The risk being the project would negatively impact on the region's thriving tourism by encroaching on an already limited short stay accommodation market.

The facility would have a 500 bed capacity for the purpose of this project and will be designed and developed to consider both workers and the community's needs,

including health, safety and social cohesion. The facility would be used during construction of the Birriwa project with the potential to use it for other projects in the Central-West Orana REZ. It would be decommissioned when the site is not longer required. After decommissioning, the site would be assessed for repurposing or dismantling based on environmental factors and community needs.

We consulted with key stakeholders, including Mid-Western Regional Council, Warrumbungle Shire Council and EnergyCo as well as worked with an external consultant to guide us through defining accommodation strategies. We have received support of our proposed workers' facility from Mid-Western Regional Council, who endorsed our proposal in correspondence dated October 2023.

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The site is located south of EnergyCo's Merotherie Hub on the opposite of Barneys Reef to Birriwa. The location for the workers' accommodation facility
was selected through thorough community and neighbours consultation, ongoing engagement with local councils and coordination with EnergyCo. In the amendment report and subsequent responses to RFI, we assessed options to manage waste, waste water and access to water in consultation with the Mid-Western Regional Council. We remain committed to maximising local employment, business opportunities and deliver the most appropriate accommodation solutions for our workforce. Next slide, please.

So this is our proposed project layout and I'm going to use this slide to discuss some of the matters that I have here. On this project layout, you can see that we
propose screen planting [unintelligible 01:00:34] should dominate the screen planting as well as they will reach heights of 2 to 3 metres quickly and form the visual screen. Table 6.1 in our visual impact assessment includes a list of suggested plant species that would inform the detail landscape plan prior to operation commencement. Our preference will be to select native and local species with quick growth times.

In terms of water quality, a soil and water management plan will be developed specifically for the site prior to commencement of construction. This plan will address water quality and management of erosion on site. The management plan will be developed in accordance with Erosion and Sediment Control New South Wales, also known as the Blue Book. Site specific plans will be designed by a certified professional in erosion and sediment control.

I would also like to say a few words about flooding. As we can see on the layout plan, key infrastructure of the project, including the BESS, has been located outside of areas with a greater flooding hazard. Our flood impact assessment includes a number of mitigation measures to prevent the impacts on flooding on neighbouring properties.

45 In terms of bushfire, ACEN understands that the area has been subject to bushfires as recently as 2017. The bushfire assessment in our development application proposes the implementation of mitigation measures, which will include clear separation of buildings and bushfire hazards, adequate water supply and pressure and appropriate access for firefighters and emergency service workers. An emergency response plan would be prepared prior to construction commencement in consultation with relevant agencies, including RFS.

5 In terms of glint and glare issues, so we undertook a glint and glare assessment as part of our development application. The outcome of this assessment is that the project is not expected to have significant impact on residences around the project, on people engaged in farming activities in the area, on the local traffic on local roads and on cyclist riding along the Central-West cycle trail, which runs along the Birriwa Bus Route South.

One final word on the potential for microclimate impacts of the project. An investigation by WSP for the Australian Clean Energy Council looked into findings from a number of studies on this issue. In summary, there are indeed some minor temperature fluxes within close proximity to the solar panels, but these fluxes disappear several metres away from the PV arrays.

MS MILLIGAN: Did you say several or seven metres?

20 MR BERGE: Several.

MS MILLIGAN: Thank you.

MR BERGE: To talk now about stakeholder engagement, I will now hand to Sarah Hafez, ACEN Australia's community engagement and communication manager.

MS SARAH HAFEZ: Thank you, Cedric. Next slide, please. ACEN Australia recognises the importance of early and effective engagement with communities and stakeholders and is committed to implementing a transparent and inclusive approach to working with communities and stakeholders who may be directly and indirectly by our projects. Stakeholder engagement on the project has been comprehensive to date and reflects the importance that ACEN Australia places on this aspect of our business.

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Engagement with key stakeholders for the project commenced in 2021. We placed a large emphasis on working with local communities during the assessment and the development application process to help us understand our stakeholders' views. Ensuring that we provided sufficient and timely information to enable communities and stakeholders to provide us informed feedback gave us a great opportunity to make amendments to the project design, reflecting on this feedback.

A social impact assessment for the project was undertaken in 2022 and that included a baseline assessment of issues and opportunities. We have tailored our engagement and communications to consider different stakeholder needs and expectations. With a community office in Gulgong, staffed by locals, including myself, ACEN Australia's community engagement and communications manager, who has relocated as a permanent resident of the region. We also have a Facebook page for project updates as well as a dedicated 1800 free call information line. We have a project email and dedicated website page with all our communication materials, maps, as well as project approval documents, reports and papers. We provide project updates and notifications of our upcoming events as well as promotion of our community activities in the Gulgong Gossip and the Dunedoo Diary.

Over the years, we have hosted several community information sessions and one on one meetings with our neighbours and other stakeholders, many of which in this very hall. Next slide, please.

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When it comes to sharing in the benefits that our projects can provide, ACEN Australia's Social Investment Program is our voluntary contribution to not for profit organisations in Gulgong, Dunedoo and surrounding communities, since the early stages of development and it's carried into our construction of our projects and throughout our operations.

Funding is available to these not for profit organisations and activities that directly benefit and enhance the liveability of Gulgong, Dunedoo and surrounding communities and since its inception, we have proudly supported more than 65 not for profit organisations and events in the Central-West region. We are committed also to ensuring that our neighbours see a direct benefit for the project, which will have an indirect benefit on the local economy and community more broadly.

The direct benefits of our project's Neighbouring Property Benefit Scheme to eligible properties was revised after we received feedback from our neighbours. From that feedback and our ongoing discussions and consultation with our neighbours, our NPBS to eligible neighbours had been revised to an annual payment for the life of the project. This change was made as a direct result of our conversations with our neighbours and at their request and we thank them for that.

 agreement with us.
 We have also reached an in principle agreement with the Mid-Western Regional Council to enter into a voluntary planning agreement. The VPA consists of a payment of 1.5% of the project's capital expenditure, paid through a series of instalments over the life of the project. ACEN Australia and council agreed to

Our NPBS is available to eligible neighbours who choose to enter into an

40 instalments over the life of the project. ACEN Australia and council agreed to discuss the payment and mechanism should the project be approved and prior to the commencement of construction. Next slide, please.

We are investigating opportunities to boost local employment and increase workforce skills in our region in the renewable energy sector. We're committed to our ongoing engagement activities and have been an active participant in the Central-West Orana Renewable Energy Zone skills and workforce working group as well as working with regional industry education partnerships program team and more recently we've been invited to be part of an introductory group, looking at ways to support the development of a Wellington Correctional REZ jobs initiative.

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Finally, after determination and should the project be approved, we remain committed to our engagement and consultation activities and will continue to
engage with stakeholders and the broader community throughout the construction and operation of our project. Thank you.

MS MILLIGAN: Thank you. Okay, let's just go straight to questions, if I could start. So Mr Berge, in relation to traffic, let me clarify, so you've said that traffic will come to the entry point to –

MR BERGE: That's correct.

MS MILLIGAN: - the project, which would require people coming from
 Barneys Reef Road to the entry points at Birriwa Bus Route South and that you will be upgrading that road and that will include a cycle track?

MR BERGE: That's correct.

20 **MS MILLIGAN:** From that point onwards you've said to us that there will be no traffic outside the project boundary. So the transport will be within, is that correct?

MR BERGE: This is correct.

25 **MS MILLIGAN:** Including to and from the accommodation camp?

MR BERGE: This is correct, with the exception of the public road crossings.

- MS MILLIGAN: Right. So thinking about the workforce who may be in the accommodation camp, I'm just wondering how that will be – how will you make sure that there is compliance, that people are not using their private vehicles on roads outside the project boundary? How does that happen? Just talk to us about that.
- MR BERGE: So I think these issues would be addressed in our traffic management plan to be prepared and approved prior to construction commencing and it would be a requirement for all the contractors to make sure we comply with these management plans. And these kind of mitigation measures on how we go to site from the regional towns to the site access point would be detailed in the traffic management plan.

MS MILLIGAN: Will you be drawing on any experience in any of your other projects for this?

45 **MR BERGE:** Exactly. I think it's important, as I said at the beginning of my presentation, we've got two projects, the New England Solar, which is now operating, so we went through construction in the last two or three years. We are now in the construction of the Stubbo Solar project, near Gulgong. So we've got

the relevant experience and we can learn from lessons if there's anything to get from that, to improve our traffic management plan for this project.

MS MILLIGAN: Right. Is there anything specific that's been learnt from that that would help you with compliance for that proposed traffic within the project, not on the local roads?

MR BERGE: I will need to go back to our construction manager at Stubbo and if you don't mind, I'll take this one on notice.

MS MILLIGAN: Yes, of course. Of course. Okay. That's fine. Can I ask you a question about – and maybe this is one for Ms Hafez, about the local procurement policy, which I'm sure people were pleased to hear. But I have a question about how that's implemented, particularly as we cascade down the contracting chain. So you will engage contractors, they will engage contractors, how do we make sure in a situation like that, how do you make sure that there is no diminution, watering down of that local procurement commitment? How does that work?

MS HAFEZ: Sure. I will talk to some of the commitments that we do have under 20 our long-term energy service agreement. So we are committed to ensuring that we meet those commitments, I'm happy to provide further information of some of those commitments and how we meet those targets and how we have been for our Stubbo Solar construction project to showcase our successes so far in the region.

25 MS MILLIGAN: Okay, so you'll provide that information to us on notice?

MS HAFEZ: On notice, for sure.

MS MILLIGAN: Okay. Thank you.

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MR DUNCAN MARSHALL: Thank you for the presentation. Just one simple question, given the long construction timeframe for the project, I just wonder whether the screen planting that's proposed, whether that can be part of early works, so that you've got 28 months to kind of establish the screen plantings and maintain them.

MR BERGE: I think it's our preference to have the screening ready at the time of - or prior to operation. So we can use the construction time for the actual planting and making sure that the vegetation screening and the plants are well-established. I also note that during construction, there might be some local activity that might impact the ability to maintain the vegetation screening. So I think the timing is probably better if we get this a little bit later down the construction stage.

MS SUELLEN FITZGERALD: Thanks, Janett. Mr Berge, you talked about the stocking rates that you've achieved at the New England Solar project. Thinking 45 about agriculture ongoing, long-term in this project, have you got any additional information about what kind of stocking rates and how you might achieve them in this project?

MR BERGE: We are learning from our experience at the New England project. I would be very happy to provide further information on this, so if you don't mind I'll take this one on notice and we'll provide more specific information about it.

MS FITZGERALD: Thank you.

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MS MILLIGAN: And a last question from me, are you able to give us any more information – your social investment program, do you have a fixed amount that you invest in the local community as a percentage? Can you share any of that?

MR BERGE: So for this project, we have a fixed amount during development activities and this fixed amount is around \$50,000 per year just for this project and this is money we're spending in the local areas. It would be the case during the development activities and then during construction and operation, as Sarah mentioned, we will have the VPA with Mid-Western Regional Council, but we also expect to continue with our social investment program. The amount has not been defined yet but we're working on this.

20 **MS MILLIGAN:** So just to clarify, 50,000 a year during the development and construction phase?

MR BERGE: Development only.

- 25 **MS MILLIGAN:** Development only. Okay. All right, thank you. All right, thank you both for your presentation. So let's move to our next speaker, Mr Ambrose Doolan, who is the mayor of Warrumbungle Shire Council. Mr Mayor, thank you.
- MR AMBROSE DOOLAN: Good morning, everyone. Good morning,
 Commissioners. It's nice to see you in person and to be able to welcome you to
 Dunedoo. For those of you who don't know me, my name is Ambrose Doolan and
 I'm privileged to be the mayor of the Warrumbungle Shire Council. The town of
 Dunedoo was established by European settlers in 1841.
- The name Dunedoo was probably derived from a Wiradjuri word for swans and I hope you'll be able to see some of those lagoons around town. I hope you've also been able to see the majestic painting on the silo down there of local man Hugh Bowman and the beautiful mare Winx. It certainly is a site to behold.
- 40 When it comes to state significant project assessment and determination, those who have the power are the state government agencies and developers. From our experience, the views of councils and local residents seem to be generally given little credence. Council urges this IPC deliberation to be different, to actually hear local voices and act to deliver the changes requested.
 - Furthermore, council calls on the IPC to defer a final decision on the proposed Birriwa Solar Project until such time as the cumulative impacts of more than 40 largescale wind and solar and transmission projects across and adjacent to the

Central-West Orana REZ are adequately identified and the environmental, social and economic costs are properly compensated.

Warrumbungle Shire is a rural region. The economic, social and cultural scene is
rural to its bootstraps. In November 2021, the New South Wales government
established the REZ and now plans to 6 gigawatts of energy transmission here,
energy generation here rather. Interestingly, there was negligible engagement with
the local government about the details of the REZ or the likely flow on
consequences.

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Within or adjacent to the Warrumbungle Shire southern boundary, there are currently 10 proposed generation projects, including this Birriwa Solar Farm. The proposed energy co-transmission line is also in the shire. Approximately 10,000 construction workers are expected to be stationed in the REZ from 2026 to 2030.

There are adverse cumulative effects arising from the 40 plus projects. These relate to roads, health, emergency services, solid and liquid waste, water and aggregate supplies and accommodation, given not all of those associated with the REZ will live on the workers' camps.

A key issue for council and its communities is confining the project related traffic to those roads prescribed in the consent as the only roads to be permitted to be used. The developer will be responsible for the upgrade and make good provisions of the prescribed traffic routes. However, based on experience, what happens is minor roads or backroads that are of gravel construction, often winding and only designed for minimal traffic movements, become the shortcuts or rat runs with the additional traffic causing untold damage and leaving our ratepayers to carry the fix up costs. This is inequitable and unjust.

30 The DPI assessment report states that there are 16 REZ projects within 25 km of the Birriwa project. Yet bewilderingly, it goes on to say there will be no material cumulative traffic impacts on the state or local road networks as a result of the project. Council strongly disagrees with this conclusion. Council urges the IPC to interrogate the developers and DPI on how traffic will be regulated to actually stay on the prescribed roads and not use other not approved roads.

The community needs to know what compliance measures have been mandated and how they will be enforced. We need to see online in real time the traffic management movements associated with all roads within proximity to the Birriwa Solar Project. The public availability of the data will help with transparency and accountability and help safeguard those road assets that are the province of local government.

On this matter, we suggest a consent condition addition. The applicant shall take all reasonable steps to enforce and demonstrate compliance of the use of the prescribed transport routes to the satisfaction of the Transport for New South Wales and the local government. Such compliance measures may include monitoring of individual vehicles with GPS and geo fences, active surveillance, incentivisation and disciplinary actions and the monthly lodgement of electronic compliance reports with council. Council has made representation to DPI to this effect but it appears to have been ignored.

5 In conclusion, the scope of magnitude of the change being contemplated here to be imposed on our community rates with that of the Hunter Valley coal and power generation developments. Irrefutably, the change will be significant. Council calls on the IPC to show leadership from the outset with this process and ensure the developers and state carry the environmental, social and economic costs, not the local population.

> This, in conclusion, I repeat, we call on the IPC to defer the final decision until such time as this is satisfactorily resolved. I would like to table for your consideration suggested amendments to DPI's conditions of consent pertaining to roads and traffic.

MS MILLIGAN: Thank you, Mr Mayor. Questions?

MS FITZGERALD: No.

MS MILLIGAN: Thank you. Thank you very much. So let me now call our next speaker who is Mr Rick Campbell.

MR RICK CAMPBELL: Hello. I'm Rick Campbell. I'm a farmer between
 Gulgong and Dunedoo. I have to be quick and make four points. A little bit closer.
 Okay. My first point, the overall design of the CWO REZ doesn't make sense. We have two dual circuit 500kVA lines running from Wollar to the Merotherie hub.
 These lines then continue to the Elong hub. Now, you would assume that the two lines are required at the Elong hub because of the amount of electricity to be delivered to that hub.

So if the Elong hub load these two lines, it will also load the two lines that continue from Merotherie to Wollar. Therefore, the Merotherie hub and all the projects connecting to it are redundant. It doesn't make sense. In that regard, it has the overall capacity of the REZ was originally three, now it's 4.5 and now the ultimate New South Wales government announced an increase to the ultimate size of the CWO REZ from three to 6 kilowatts. So that's the maximum. You only need one dual circuit 500kVA line to accommodate that amount of electricity. What's going on?

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Next point, rehabilitation and decommissioning. The sensible thing would've been to instigate a bond system. But that hasn't happened. We are relying on guarantees given by developers. My argument is if these guarantees are so good, why won't the government underwrite these guarantees? And if the government is not prepared to underwrite these guarantees, what does that say about these guarantees?

Next point. The sun tax. This is a tax, a proposed tax on rooftop solar that is fed

back into the grid. You'll be paying to put electricity back into the grid. Now, so we're discouraging rooftop solar but at the same time we're encouraging solar farms. It doesn't make sense. What's going on?

5 My final point and this is from a report in 22 from EnergyCo, developing a guideline on orders prohibiting connection to the REZ network where community support hasn't been established. Repeat, prohibiting connection to the REZ network where community support hasn't been established. We've got this meeting here. There is obviously community objection to this project. Again, what is going on? Why are we here? And that is my presentation. Thank you.

MS MILLIGAN: Thank you, Mr Campbell. Our next speaker is Ms Sally Edwards.

MS SALLY EDWARDS: Good morning, Chairperson, and the panel commissioners. I am grateful for the opportunity to present to you this morning my concerns about the key issues identified in the Department's assessment of the development application for ACEN's Birriwa Solar Project. My name is Sally Edwards. I live in the Warrumbungle Shire Council area and this region is located in the Central-West Orana Renewable Energy Zone.

Dunedoo and Gulgong are not unlike small rural communities across Australia and it is my connection with and love of the land, its magnificent and diverse array of inhabitants and my deep care for small rural communities that has me standing here today. Next slide, please.

Rural communities are connected in a unique and extraordinary way. What underpins this connection is a strong set of guiding values, values that community members embody every day, values that include service to community, actively volunteering and always helping each other where possible; connection, working to build strong and valuable relationships within the community; lifestyle, working to maintain the character of the town and region and the beautiful landscapes appreciated by locals and tourists alike; history, acknowledging, preserving and celebrating the heritage and stories of the region; and pride, cultivating a sense of pride where the people make the difference.

When state significant developments are assessed and impacts identified and mitigated, there is an apparent habit for those both planning and assessing to disassociate from the feelings of the people directly impacted, the effects on local flora and fauna and from the nature of the impacts themselves.

May the panel please consider the feelings of the people who are and will experience family or business breakdown and loss, seemingly insurmountable levels of stress and fatigue, strained or damaged neighbour relationships or friendships, breakdown of volunteer groups, loss of friends for young people, a loss of home and sense of place. These are the indirect impacts that aren't considered that are happening right now and will continue to occur through the development and construction phase. These will be the untold stories of the losses

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that the community will be forced to bear. May they please be considered. Next slide.

- This slide is a map produced by Mid-Western Regional Council, depicting the
 proposed state significant developments in the Central-West Orana REZ. As outlined on the IPC website, I understand that the Commission panels appointed to determine each project must consider each development application separately. Next slide, please.
- 10 I would like to ask the commissioners to consider that while there is no responsibility to assess the cumulative impacts such as loss of agricultural land and associated decrease in food and fibre production, one would then expect it important that the Department assessment of these impacts be rigorous and backed by factual evidence. Next slide.
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The Department's conclusion in the assessment report at 5.2.2.83 estimates the loss of agricultural land in the CWO REZ to be 15,837 hectares and that this would result in a negligible reduction in the overall productivity of the region. What are the actual losses to the regional lamb, beef, wool and grain production? How was this calculated and assessed? Energy security is measured in how many homes we generate power for. How many homes would this loss to production have fed and clothed? I encourage this to be measured and considered. Could the Commission investigate the accuracy of the percentage of lost agricultural land, as stated in the assessment report? Next slide, please.

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I would like to raise my concern over the issue of terminology used to quantify impacts. Sorry, next slide. Or the loss of agricultural productivity, et cetera, and the use of terms that vary in definition, dependent on any individual's perspective. Terminology utilised includes "not significantly reduce," "not result in

unacceptable impacts," "not result in any significant impacts," "not result in significant visual impacts." How exactly is "significant" measured for this purpose? Significant to who? Unacceptable to who? To the people that live here or the Department? I believe "not significant" is not a quantifiable term for measuring such important impacts.

Throughout the assessment, there are instances where terms that are used suggest there is little understanding of local context, what it means to live rurally, what it means to be a farming family, what it means to be part of a small community. Could the Commission ensure that in its deliberations, it utilises the expertise, knowledge and experience of people who understand and value the concept of living and farming rurally.

The Department has stated that the site is in a sparsely populated area. This is generally a common occurrence in farming areas and while this presents a benefit to the Department in a lesser number of impacted families or individuals to count, the impacts remain real and present as real concerns to those facing them.

The last issue I want to raise around perspective is the Department's statement

regarding flow on benefits to the local community. Flow on benefits from any development can only be realised by the local community where there is existing capacity to do so. When unemployment is already very low, when volunteers are already stretched, when essential services such as health and education are already extremely hard to access and at times unavailable, the prospect of 500 new construction jobs does not present as a benefit at all. Not without the plans to expand capacity of services and of the community to enable embracing such perceived opportunities before they occur.

10 If the development is granted consent without consideration given to this particular issue, the benefits will be none. There will instead be further social impacts to already sparse essential health services, impacts to local businesses trying to find employees, impacts to volunteer organisations and the services that they deliver to their community.

The Department considers the site location is suitable as it is located in the CWO REZ. I would like the Commission to consider and reflect that the views of our Warrumbungle region community were never sought by the minister prior to declaring the CWO REZ, even though the legislation clearly states this requirement. Next slide, please.

When questions were posed through budget estimates this year, the answers provided showed no evidence of the views of our community actually being sought, recorded and considered. Why is it that in this case submissions received by the Department through public consultation remained confidential? Not redacted even, but confidential. As stated by the Minister for Energy, three of the six submissions to the CWO REZ declaration were from renewable energy developers.

I know through my own experience as a community development coordinator at the time and a volunteer, that our council, nor our local community organisations, either knew about the proposed REZ or the associated public exhibition. Hence why there are no recorded views from our community about the REZ. Two years down the track and the rollout and delivery of the CWO REZ and residents,
community and council are still requesting that the views and perspectives of the local community and the local council be considered one project at a time.

I feel our planning system and legislation have failed our communities. Can the panel consider that the challenge of highlighting the concerns of residents and communities for each individual project, EIS, amendment reports, assessment reports, guidelines, is arduous, time consuming and at times soul and family destroying.

There are many community members who hold grave concerns for the future of our region and while only a number are here to speak to you about the assessment in person today, can you consider that many feel defeated. Defeated by the process itself. Through many attempts to raise their concerns over the project impacts and the cumulative REZ wide impacts, they still feel unheard. That the challenges of

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life haven't lessened while the REZ is being rolled out. Cancer diagnoses are still occurring. Family loss and grief is still being overcome. Recovery from natural disaster still lingering and meanwhile a proposed change to the landscapes they call home, from farming and bushland to industrial energy generation.

Rural people are resilient. I doubt there is a more called upon trait as a farmer than resilience. But persistence and tenacity to keep saying the same thing over and over again without being heard or considered requires more than just resilience. Is it even fair? Isn't fairness and transparency paramount, according to the state significant guidelines for community engagement? Last slide, please.

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Could the commissioners please consider 5.2.1 provisions of the LEP under land use compatibility point 74? An interesting choice of terms by the Department, clearly quoting two options for the reading of the LEP, a strict reading and a broader reading of the Warrumbungle LEP. As a resident of the Warrumbungle Shire Council and ratepayer, I would like the commissioners to clarify with the Department exactly what the difference between a strict reading and broader reading of the LEP is and where the definition of both can be obtained and confirmed.

I'm sure developers and ratepayers would also like to understand the difference between the two readings. As it stands, section 1.2 of the LEP clearly states the eight aims of the plan, which I believe our council and ratepayers would not only support but also rely upon. If a broader reading of the LEP can determine that a prohibited development is actually not prohibited, is the LEP even a legal and useful guide for development across the Warrumbungle region?

The Honourable Anthony Roberts MP's statement of expectations for the Independent Planning Commission, as found on the IPC website, states that there is an expectation set for the Commission to provide ongoing monitoring of performance from a qualitative perspective, including the examination of legal robustness of determinations. Could the Commission please carefully investigate this legal interpretation of the Warrumbungle LEP by the Department and the potential ramifications of consent being granted to what should be a prohibited development under a strict reading of the LEP.

I've already gone over time and unfortunately haven't had time to cover all of my concerns, particularly environmental assessments around flora and fauna, soil and water impacts and solar panels contributing radiant heat to the atmosphere. I urge the IPC to utilise extensive agricultural, environmental and legal expertise through its deliberations and not grant approval to this solar project.

MS MILLIGAN: Thank you, Ms Edwards. I note your comment that you thought you had inadequate time, so please feel free to leave us with any other material or of course provide us with an additional submission after we finish today. Thank you. I note also that you raised three issues that would appear to be questions back to the Department.

I might just say to Mr Davies, because I know that you'll be coming back to speak to us last thing this afternoon, if possible you might sort of think about whether you can answer any of those questions about the loss of agricultural land and how that's addressed in the assessment report. The question of terminology and what that means and how you're guided in the use of some of those terms such as "significant." And that last question about the interpretation of the LEP. You may or may not be able to address those issues on your feet as you stand here but maybe think about that. Thank you, Ms Edwards.

Our next speaker is Mr Bill Stinson, please. Do we have any information about – I'm sorry. I'm sorry, if I read my notes, I'd be able to tell you he's on the telephone. Okay, so do we have Mr Stinson? Okay, Mr Stinson, Janette Milligan. Can I just check that you can hear us? Okay. All right. So we're going to move on and we'll sort out those connection issues and come back. So our next speaker is
 Mr Kevin Loughrey, if I could ask you to address us, please. Thank you.

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MR KEVIN LOUGHREY: I'm Kevin Loughrey and I hold an Honours degree in mechanical engineering and I majored in thermodynamics. I served for 32 years in the Australian Army, both in the regular and the reserve. I then formed companies, employed people and now I'm running for the senate in the federal election next year.

First slide, please. I've read the Act that established the Independent Planning Commission. I see you have a broad canvas upon which you can paint. The minister allows you great freedom to investigate various things and I would suggest to you that the whole premise upon which this project is based is flawed.

The first thing, we talk about net zero. Net zero aims to reduce human emissions of what are referred to as greenhouse gases. A key component of this is the use of wind, solar generation systems rather than coal fired base load power stations. Next slide. Can we hurry up the slides, please? I've got five minutes.

Okay. It says net zero is predicated upon three falsehoods. Firstly, that carbon dioxide, methane and nitrous oxide appreciably warms the Earth's atmosphere. As someone knowledgeable in this, I can assure you it does not. The next falsity is that the Earth's atmosphere is warming. It is not. It is cooling. Next one is wind, solar electricity generation systems are cheaper than coal fired power stations. I noted in the previous or earlier presentation there was no mention of what the expectation is in terms of cents per kilowatt hour for the generation of electricity with a reliability of four nines, that's 0.9999. Next.

Okay. Lie 1. CO2 appreciably warms the Earth's atmosphere and this I'm in good company with Professor John Clauser, who is a recent winner of a Nobel prize for atmospheric physics, Professor Richard Lindzen, who is also expert in atmospheric physics, Professor Will Happer, who happens to be, I would say, a friend of mine, Professor Don Easterbrook, Willie Soon, Professor Ian Plimer, who is a friend of mine, Professor Valentina Zharkova and the list of eminent physicists go on. They all say it's rubbish. All disagree unequivocally with the subject assertion and I've provided Professor Clauser's paper to the Commission for you to study. The CSIRO has been challenged to provide proof that CO2 appreciably warms the Earth's atmosphere for years and they cannot. Next slide, please.

Okay. Next slide. I urge you to have a look at Climate: The Movie. There you will see some of the personalities that I just referred to and they tell you exactly what I have just said. Next slide. Lie 2, the Earth's atmosphere is warming. No, it's actually cooling. I'm going to show you a series of graphs. Next slide. Okay, this is from ice cores in Greenland. It shows that for the last 8,000 years, the Earth's atmosphere has been cooling. You'll note at the same time and the bottom graph is carbon dioxide. Carbon dioxide concentration was increasing during the time when the Earth's atmosphere was cooling. We're right down at the bottom of there, at the head of the arrow. So anybody who suggests that warming will be catastrophic are simply lying. Next slide.

This is from the Bureau of Meteorology. This is data extracted from Australian archives. Postmaster-General Department used to collect the data and now the Bureau of Meteorology collects temperature data. You will see that the graph is dropping. Australia has been cooling for the last 140 years and they're the temperature measuring stations. You can see the temperature measuring stations there. They're the ones from which this temperature data was taken. If you take temperature data from urban conurbation, you will find warming simply because of the concrete bitumen and the fact that there's no wind. Next slide. Can I have a few more minutes because the slides have been a bit slow?

You'll see it's going down. Next slide. This is in Durban, which is on the east coast of Africa. It's going down. Next slide. This is Sierra Leone, going down. Next slide. This is Antarctica, the Japanese Meteorological Agency from 1960 almost to the present day. Last year was the coldest temperatures on record during the winter, the temperature's going down in Antarctica. Next slide. Okay, this is Brazil. Next slide.

Okay, wind and solar are cheaper than brown coal. That's a big lie. I've done a
scoping study, which I've provided to the Commission, which shows that the cost of electricity generated by solar means is likely to be in the order of about 21 cents per kilowatt hour. When you take into account that you've got to back up with something. You'll find that to provide reliable power will require storage four times the size of the Warragamba Dam, perched at 800 metres. This project is entirely impractical and expect the IPC to look into this and to determine whether this whole idea of – next slide, please – will determine whether the injection of intermittent power, which is driving our energy costs up, next slide.

This shows you the CPI and it shows you the cost of electricity is the red. You'll notice that it's going out of control, as we embrace renewables. Next slide. Okay, conclusion. There's no point in reducing emissions of CO2. I've just shown you that. Solar and wind generation systems are going to be far more expensive. Australia is approximately \$1.3 billion in debt as a consequence of federal and

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state debt. Buying solar and wind appliances from Communist China to put this country even further into debt whilst destroying the competitiveness because of expensive electricity is both stupid and reckless, endangering this nation's economy and its security.

Now, if you've got children and if you've got grandchildren and I suspect you have, we're all in this together. It's their future and we're ruining it. I hope you'll take what I've just told you and you'll look into it and decide that this project and wind projects have absolutely no credibility. Thank you very much, by the way, for listening to me.

MS MILLIGAN: Thank you, Mr Loughrey. Our next speaker is Ms Juleen Young, please. Now, we were expecting Ms Young in person. Yes, okay. We can come back. She may have been held up. So I'm going to keep going and ask Mrs Margaret Armstrong if she would address us, please.

MS MARGARET ARMSTRONG: As a community member affected by this proposal, I'd like to thank you for the opportunity to address the committee. Just to clarify, Birriwa solar electricity generation works is not a farm, it is a factory, necessary to convert sunshine to electricity. The total area of the site is more than 15 square kilometres of agricultural land. The factory will consist of up to 1.4 million solar panels and potential hundreds of container size units that will make up a BESS backup, each air conditioned, which will require a full-time source of energy.

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The site will also require – include numerous inverters, a substation, as well as internal transmission lines to connect to the new transmission lines that do not yet exist. The proposed site is described as largely cleared agricultural land and yet a little over 4 square kilometres or almost a third of the site will need to be cleared of native vegetation, some of it endangered, to facilitate the factory. We moved to this region because the region is teeming with prolific population of native wildlife and birds, of many different varieties and including endangered and protected species. All of these creatures will be destroyed or displaced in the site preparation.

Also, we know that more than 19 endangered species of native birds, including bats, have been identified in the region and that koala habitat has been confirmed on the Birriwa site too. This site is also traversed by numerous waterways and farm dams, which the wildlife depends on as familiar sources of drinking water.

- 40 The larger animals such as kangaroos, wallabies and emus will likely escape the site preparation but they will be permanently fenced off from familiar territory and drinking sources.
- After the fire's been put through the site and the bulldozers have come through, levelling the ground to bare earth, there will be thousands of pilings driven into the site to support the solar panels, as well as kilometres of trenches for the wiring. There is going to be serious problems with erosion when it's time to decommission and dispose of the factory. The stories of sheep being run under the

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panels is not a common practice. They have put them in here and there for marketing purposes and it ended badly in one solar factory site where two sheep had their fleece caught up in the tracking mechanism and were partially scalped. Needless to say, they did not survive.

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Expected operation, "The expected operational life of the infrastructure is approximately 30 years. However, the project may involve infrastructure upgrades and may extend the operational life." This statement is little more than a guess. Crystalline silicon solar panels lose around 20% efficiency over about 25 years' time. It is recommended that commercial installations be replaced at 80% efficiency.

In fact, panels may not last 25 years in harsh conditions, such as temperature extremes and most winters here in our region will experience sub-zero temperatures, winter temperatures, and in summer, 40 degrees plus. This project, if installed, would not last 30 years, not the solar panels, not the inverters, which have a lifespan of 10 to 15 years if you're lucky, and certainly not the batteries, which have a lifespan of between 10 and 15 years.

A point to note on solar panels is that the largest solar panel manufacturer in the world, LONGi, had a net income fall of 44% in the third quarter of 2023. It has been suggested that they were forced to lay off 30% of their employees. The company's shares fell 70% from their peak in 2021. Are we about to be dumped on with cheap solar panels? And how does this news bode for the solar industry?
Is Australia ignoring global signs?

Operation, "The solar farm and BESS would operate 24 hours a day, seven days a week." Just what does that even mean? They might be connected to the grid 24/7 but over their lifetime are idle 75–80% of the time. So where will the thousands of homes, as claimed, get power for the rest of the time? The quote, "1 billion capital investment" is an absolute farce. What investment? The Australian taxpayers are funding this rollout and the subsidies continue for the life of the project.

The profits from the subsidies are going directly to the parent companies overseas, unless it's to our homegrown billionaires, who only have their own self-interest at heart. Our electricity bills are out of control. Almost 4,000 small businesses have collapsed so far this year as a result of this, which is more than 60% up on last year.

And to conclude, the cumulative effects. The cumulative effect on Australia for wind, solar and BESS backup is going to be devastating to our environment and to the economy. Destruction of the ecosystems is guaranteed by going down this track and is happening with every project that is installed. Rural communities are being permanently divided and lifelong and even generational relationships are
 being destroyed. You do not have social licence and you do not have our consent.

MS MILLIGAN: Thank you, Ms Armstrong. Now, at this point we'll go back and hear from Mr Bill Stinson. Mr Stinson, can you hear me? It's Janett Milligan,

chair of the panel.

MR BILL STINSON: Hello.

5 **MS MILLIGAN:** Hello. Hello, Mr Stinson. Thank you. And thank you for your patience but we can now hear you –

MR STINSON: Hello.

10 MS MILLIGAN: Okay. That's okay. So Mr Stinson, can you hear me? Okay. Mr Stinson –

MR STINSON: Can you hear me?

15 **MS MILLIGAN:** We can hear you well. Can you hear me? Okay. Mr Stinson, if you can hear us, we can hear you clearly, so can we just hand over to you to address –

MR STINSON: Hello, can you hear me?

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MS MILLIGAN: Yes. Mr Stinson, I can hear you.

MR STINSON: Go now?

25 MS MILLIGAN: Yes. Now, we can hear you. Can you hear us, Mr Stinson?

MR STINSON: Do you want me to go now? Yes, okay. Thank you.

MS MILLIGAN: Okay. All right. So, Mr –

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MR STINSON: Good morning, Commissioner, and good morning to the rest of the panel. On 30 November 2023, the Climate Change Net Zero Future Act was passed by the New South Wales parliament. The purpose of the Act is to give effect to the international commitment established through the 2015 Paris agreement to, and these are the words of the Act, "Increase the ability to adapt to the adverse impacts of climate change." However, article 2 of the Paris agreement says, point 1B, "Increasing the ability to adapt to the adverse impacts of climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production."

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I put it to the committee that the state government has not given full effect to the Paris agreement by failing to insert the complete reference clause in the Climate Change Net Zero Future Act and the federal government is in breach of its commitment under the Paris agreement. I further put it to the committee that if this project is approved, it will be in breach of Australia's international commitment, pursuant to the 2015 Paris agreement.

Secondly, the applicant submits in the environmental impact statement at 3.4.3,

decommissioning, that once the project reach the end of its investment and operational life, the project infrastructure will be decommissioned and the development [unintelligible 01:57:51] existing land use, namely suitable for grazing or cropping or another land use as agreed by the project owner and the landholders at the time. I believe there should be independent soil testing. There are reports of toxic chemicals contained in PV solar panels, which have leached into the soil beneath the panels. It is critical to establish a baseline to enable confirmation that the soil at the end of life of the installation has the same soil health characteristics.

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And finally, point 3, the 2020 independent review of the Environment Protection and Biodiversity Conservation Act by Professor Graeme Samuel AC found that monitoring, compliance, enforcement and assurance under the EPBC Act is ineffective. There has been limited activity to enforce the Act over the period of 20 years it has been in effect and the transparency of what has been done is limited. Monitoring, compliance, enforcement and assurance activities are significantly under resourced.

The failure by authorities to monitor compliance including the availability of sufficient decommissioning and rehabilitation funds will, in my opinion, lead to abandoned wind projects and solar projects with decommissioning and rehabilitation costs to be met by the landholders or ultimately the public. Mining leases are required to provide bonds for the rehabilitation of mined areas at the completion of mining operations. No such rehabilitation bonds are currently required for wind or solar projects, which has resulted in many abandoned projects overseas being left as ghost structures dotting the landscape.

If the project is approved, a condition should be that provision of a rehabilitation bond with a predetermined amount sufficient for decommissioning of infrastructure and rehabilitation of the land. At the moment, Crookwell 1 Wind Farm is in dispute with the local council. It was completed in 1998 and Tilt Renewables have said to the council they want to make it a wind museum, a wind turbine museum. So there is this dispute that the council under their condition 19 wants it decommissioned. Thank you to the committee.

MS MILLIGAN: Do a quick check to see if Ms Juleen Young is with us? Okay, are you ready to speak? Okay. Thank you. So our next speaker is Ms Juleen Young. Thank you.

40 MS JULEEN YOUNG: Good morning.

MS MILLIGAN: Good morning.

MS YOUNG: Okay. I am a resident of the Warrumbungle Shire and my husband
 and I run a mixed farming operation just north of here that has been family owned
 and operated since 1910. Just for the record, I am an executive councillor of New
 South Wales Farmer and a member of their Conservation Resource Management
 Committee Environment. I am here today as a resident of the Warrumbungle

Shire.

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I would like to ask some questions of the REZ, especially the environmental impacts these renewable energy projects are going to create for New South Wales and our region. Is it correct that these solar panels generate 60% heat and less than 40% energy? How much of this energy reaches the end user of the transmission? All solar panels and blades from these wind turbines have to go to landfill. Where are these sites? Our local councils do not have the capacity to take this waste. If the panels could be recycled, I have heard figures that it would take 900 years to recycle what is already here.

We are being told that the land will be returned to agriculture at the end of life of these projects. There is no provision plan by the authorities to remove these infrastructures. This will lead to an environmental disaster. We will be left with millions of hectares of disused solar and wind turbines. We don't know that at the end of life that these lands will be suitable for food production or to run livestock. What contaminants will leach into the soil? For example, zinc from the post of the supports of the panels.

We are being told sheep can be run under the panels with no fencing, water troughs, et cetera, yards for treatment of sheep or shearing sheds nearby. Of course they want the landowners to run the sheep as they are effective at keeping the grass down but with no improved pastures to graze on, the sheep will not do well. We will be left with salinity problems, as trees that were planted are removed and grasses are continually kept short by grazing or other means.

The wind turbines, there has been research done overseas that the blades of the turbine weather and wear, allowing plastic and fibre to disperse into the air, on the ground and over livestock. How long is this going to be before these particles show up in our food chain? We are being warned about plastic particles showing up in the ocean from our washing powders, et cetera. Are we looking at a situation like James Hardie and asbestos? These wind turbines have an end of life of 25–30 years but the blades have a life of 10 years.

There was blades damaged at a small turbine and it took three semi loads to remove it. If the blades had to be replaced every 10 years, that would take 27–30 semi loads to landfill for one turbine. How many turbines are there in New South Wales? The cement blocks for these large wind turbines need 7,500 tons of cement for the footings. Where is the water coming from for all these cement footings?
These footings will be left in the ground and cannot be reused. What is going to happen to all the rock and soil that have to be removed for each of these footings?

Where is all the water coming – going to come from for these projects? If it is underground, what effect is that going to have on the other users and the towns that rely on it? Transmission towers are going to have a 30 by 30 square metre permanently cleared pad under each tower. How is this going to be achieved? Chemicals? If there are renewable projects only have a life of 25 to 30 years, what is going to become of the transmission network? Are they looking to export power in the future as we reduce our coal exports?

As all this agricultural land is removed from food production, we can see the potential of approximately 50 families leaving the area. As the cumulative effect takes hold, leading to the removal of teachers, medical services, policing, business, closing and the departure of our rural communities, our shire and beyond.

The cumulative effect will affect the whole shire and beyond. The social destruction and stress that has been caused in these communities, you might have power to Newcastle, Sydney and Wollongong but where is the food going to come from? I think these projects were put forward with no planning done on how it was going to happen and no consideration of the impacts or the logistics. Thank you.

MS MILLIGAN: Thank you very much. Our next speak is Mrs AmandaBowman, please.

MS AMANDA BOWMAN: Good morning, ladies and gentlemen. My husband and I run a family mixed farming business which was settled in this area in 1822 and has been held in the same family. That's just to give you a bit of background. We are neighbouring the Birriwa Solar Farm project. We don't have any visual impact, which I'd like to point that out to you but there are many, many other problems besides the visual impact.

The fire risk and limitations to firefighting is a real concern to us and to the community. We are directly on the eastern side of the proposed Birriwa Solar Farm and as we all know, fires go from west to east and because of the location of the Birriwa Solar Farm, can ACEN guarantee how the Rural Fire Service and the local firefighters will be able to access the solar farm and where the panels are? Because I'm not sure how you can get trucks and things in there to fight a fire.

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We've had two huge fires in this area, one in 1979, which burnt out a lot of the Birriwa area and a lot of where the – on the southern side of the Birriwa Bus Route South, from Birriwa right through to nearly to Gulgong and that's a worry. And then the 2017 Sir Ivan fire, which burnt 55,000 hectares.

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I'm concerned about the insurance liability for the neighbouring landholders and the near neighbours. The proponent must, in my opinion, indemnify the neighbours and the near neighbours against prosecution, following any incident of damages the projects associated with the infrastructure so that if we have a fire that starts 10, 100 metres from the Birriwa Solar Farm by a strike of lightning, which is a natural cause, how can we be not be liable for that. And that needs a real look at, I think.

The workers' camp. There will be a huge cumulative impact of the temporary workers' camp accommodation. The safety of local people living within the close proximity of the camps, the Birriwa Solar Farm, [unintelligible 02:10:37] workers plus the proposed accommodation for EnergyCo for 1,200 workers. That is an increase of 1,700 people within 6 km of our home. The home and farm community - our home and farm security will be compromised by having a very large increase to the population during the construction stage and ongoing maintenance of the Birriwa Solar Farm. And a quote from the assessment report, "The Department considers the project would not result in any significant impacts to the local community." There are 22 non-associated residents within 2 km of the development footprint. Will there be too much congestion?

Stock routes. Stock routes and erosion. We have stock that we move along our roads to get from one property to the other. That will be deeply impacted in the running of our business and other community businesses as well that also do the similar thing. And that's all part of the animal husbandry, to be able to move the stock from paddock to paddock and we have a permit to move the stock along these backroads, as I'm sure lots of other people in the community do as well, and that's going to contribute by having the Birriwa Solar Farm there, it's going to impact our children not being able to ride their horses and move the cattle, as they're part of the business as well.

Erosion. The proponent of the Birriwa Solar Farm, there's going to be 1,300 hectares of roof area and all the water off a roof has to go somewhere and it's going to be running through all the local roads, the local neighbouring properties and the existing waterways going to the Talbragar River. The Talbragar River runs to the Macquarie River and then on to the Menindee Lakes. So that is a worry with the erosion and also the toxicity. Yes.

- And I just feel that in conclusion, sorry for going over time, that this is a huge impact on the food chain. This is prime agricultural land, not just it's farming, it's sheep and it's cattle and it's really going to affect feeding the people, both overseas and in Australia. Thank you very much for your time and thank you of coming to Dunedoo.
 - **MS MILLIGAN:** Thank you, Mrs Bowman. Thank you. Our next speaker is Mr Dennis Armstrong and Mr Armstrong, you're sort of speaking to us twice. The first time I understand –

35 **MR DENNIS ARMSTRONG:** Well, I've got two different hats on today.

MS MILLIGAN: Yes. So you're speaking initially as a community member. And so we'll give you your time signals for that but please remain where you are because you also are then going to speak to us as a representative of a community organisation.

MR DENNIS ARMSTRONG: That's correct.

MS MILLIGAN: Thank you.

MR DENNIS ARMSTRONG: Thanks. Is that all right? Thank you for the opportunity for me to address the committee. My background, I'm retired now but my whole working life as an electrical engineer, management accountant,

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management consultant and project manager all involved innovation and making organisations and systems work much better. My clients included transformation projects for the Department of Defence, the Department of Finance, Boral, Hamersley Iron, which is now Rio Tinto, State Rail, Electricity Commission and Sydney Electricity, just to name a few. I know how to develop strategies, business cases and deliver a project.

I now want to address examples of our lived experience in Gulgong because we have a solar works there and we have one being built right now. Today I will speak against the industrial solar and battery works proposal by sharing with the Commission our already lived experiences with projects already operational, under construction or proposed not far from the Birriwa site. The experiences are relevant to Birriwa proposal and the Department's assessment.

15 From my farm, located outside of Gulgong township, I am 4 km from the operational Beryl Solar Works, 5 km from proposed Tallawang Solar Works, 8– 10 km from the under construction Stubbo Solar Works and we'll see all of the 60 odd wind turbines of the proposed Barneys Reef works. I can see the Stubbo, Tallawang and Barneys Reef sites from my house.

I now speak from my experience using a few examples of what actually happens near Gulgong now, which applies equally to Dunedoo and many other rural towns across New South Wales impacted by variable generation projects. The proposed Birriwa works will only add to these issues.

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My electricity costs. From the full year to May 2019 to May 2024, my net cost of electricity for the same consumption has risen 413%. That is \$1,289 per year. Numerous unplanned blackouts, untold brownouts and voltage spikes occur each year. Damaged electronic equipment has often been the result. Beryl Solar Works became operational in 2019. No coincidence, I'm sure, that we have all the problems we have.

Beryl Solar Works. In summary, 99% of the expected output covered by long-term contracts was not achieved. The site's been plagued with lightning strike, heavy rain, hail, component failures and onsite fires. The third owner in three years paid one third of the cost that it cost to build that particular solar works. It's up for sale yet again, so a fourth owner in five years, looks like the case.

Fires near Gulgong. Last year we had multiple out of control fires at or near the
Beryl, Tallawang, Stubbo and Barneys Reef sites and multi-day burn offs at Solar
Stubbo Works. Just southwest of Gulgong in October last year, we had the state's three worst bushfires that took days to extinguish, even using water bombing
helicopters and aircraft and all our firefighting resources. Firefighters will not enter a solar works to fight a fire, just a point earlier that was made by the previous
speakers. They will not go on to solar works farms or fight a wind turbine fire. They will only manage the perimeter.

The fate of the 18 hectares of fire damaged solar panels from the Beryl fire that

took place on 24 April 2023 has not been forthcoming from the Department despite multiple requests. Was the soil and water contaminated? Were the panels buried on site despite such panels being declared as e-waste in Victoria and the EU? We are entitled to know what happens to these panels, these toxic panels.

Road damage. Half my own road was demolished in about two months by the conga line of out of town water tankers that were using it and another nearby local road. We were told these roads would not be used by heavy trucks. Smaller vehicles would not safely use the roads until repaired. Both roads were eventually fully resurfaced following my complaints to the council.

Traffic accidents. I understand that three B-double trucks carrying solar panels for the Stubbo works have been in accidents. Also, I have noted an increase in roadkill between Gulgong and Mudgee. The Department was warned that the approval of the Stubbo project would result in increased traffic accidents and increased risk to wildlife and road users. Mitigation and consent conditions are inadequate if there is no enforcement of the consequences for breaches.

There is no consent and social licence for this project. The communities in our region have overwhelmingly not given their consent to any of the proposed variable energy construction projects to date. On two solar works proposal, the Western Regional Independent Planning Panel and the Land and Environment Court have unanimously agreed the projects were inappropriate for our area.

- 25 However, the Department's assessment appears to have no weight for our community's want. Birriwa had 130 objections out of 134 submissions, 97% objections. The proposal does not have community consent and therefore has no social licence.
- 30 In conclusion, I only touched on some of the examples in the time allowed but will conclude my presentation at this point. Thank you for your time, committee. Are there any questions?

MS MILLIGAN: Not at this point.

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MR DENNIS ARMSTRONG: Thank you.

MS MILLIGAN: So Mr Armstrong will now speak to us as a representative of community group Save Our Surroundings.

MR DENNIS ARMSTRONG: Okay. I've got to put my other hat on. Okay. Again, thank you for the opportunity to Save Our Surroundings to address the committee. What is SOS? Save Our Surroundings is a wholly volunteer independent organisation that was founded in 2019 and specialises in research, analysis and publication of findings, centred on the claims made for variable energy. Our work is fact based. We have appeared as witnesses at joint federal parliamentary hearings on climate change bills and on Australia becoming a green energy superpower. The treatment by the applicants and the Department towards SOS. Despite requests made to the Department to have the applicant answer each specific question we pose in our usefully detailed submissions, it has only ever occurred once. Other times our submissions have been either ignored or much of the unpleasant facts that were presented were not addressed.

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In the one case where an applicant for a 100 megawatt four hour standalone BESS, a battery energy storage system, answered nearly every question we posed. In fact, they were quite an honest bunch of people, I think. Anyway, much was learnt from the shortcomings of all BESS installations applies to this project.

One is the often extravagant claims made by the applicants which SOS frequently highlights. In this amendment report, the applicant for the BESS stated, "In addition and as a result of the submission from Save Our Surroundings, output calculations were checked and refined. The annual output of the proposal was wrongly calculated at 380,000 megawatt hours. If calculated in one charge discharge per day, this has now been updated to 146,000 megawatt hours."

20 Now, consider the implications of that statement by that proponent, given that no significant changes were made to the development application or capital value. A 63% reduction in output and therefore revenue, reduced supply to the grid, reduced project viability and future value. A community group had to expose the obviously false claim, yet the project was still approved.

Other issues identified were that a BESS is a net consumer of electricity. It increases greenhouse gas emissions, will only provide electricity once a day if fully charged, it's no more reliable than the reliability of the grid itself, requires batteries and inverters to be replaced every 10 to 13 years, decline in efficiency rapidly, 24% by year 10. Nearly all the components are sourced from China, so potentially impacting energy security and national security. Unrealistically claims that charging will only occur when access wind and solar energy occurs during the day, no reliable data exists on battery performance in Australian conditions. Most of the weight of the disposed batteries goes to landfill, et cetera.

Solar panel component. The proposed Birriwa 600 megawatt two hours BESS will suffer from these and other issues but none have been considered in the assessment report. Turning to the solar panel part of the proposal, almost certainly the PV solar panels and much of the infrastructure will be made in China.

SOS has shown that Chinese sourced solar panels have so much embedded greenhouse emissions in them before they leave the factory that they'll have to generate electricity for at least 11.6 years to offset just the emissions embedded in there. Add the embedded and ongoing emissions for the total project and one can conclude that will not reduce emissions over its lifetime, yet emissions reduction is a major justification for the project.

Material usage is unsustainable. A partial analysis of just the solar panels and the

supporting steel supports indicates that the weight of materials required per megawatt hour of electricity produced over a 60 years period is 3.1 times more than a fully built modern base load power station. This is a waste of resources and is unsustainable.

In conclusion, SOS has only presented some of the significant emissions when evaluating the claims of the applicants and accepted without substantiations by the Department, even when drawn to the attention of the Department. One can draw the conclusion that unsubstantiated claims by emissions reduction, cheaper electricity, increased grid reliability, ecological sustainability, energy security, job creation, et cetera, are at the best questionable and in the cases SOS has analysed, in our opinion, untrue. Thank you.

MS MILLIGAN: Thank you. Can we move now to our next speaker, who is Mr Rick Colless. Thank you.

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MR RICK COLLESS: Thank you, Commissioners and good afternoon to all the participants here today and thank you for the opportunity to present my thoughts to you today in relation to the Birriwa Solar Project. I have a view and I'm going to talk to you essentially about potential land degradation outcomes that could result from some of these project areas. And I have a view that we cannot consider alternative energy projects such as wind and solar be considered renewable if there is extensive risk of serious land degradation issues developing from that. And I think that's a pretty fair position to take.

Let me preface my remarks by saying that I have read this document, the Land Use and Soils and Erosion Assessment as part of the EIS and it's very obvious to me that this report is essentially a desktop review type of document rather than a detailed assessment as part of the – a detailed site assessment. There are no details in the document describing the time spent on fieldwork during the preparation of the report other than a brief statement on p 23, referring to the site inspection on 2 December 2021, at which time, "Opportunistic sampling of soils was undertaken at three sites."

35 This site in total is 1,535 hectares. To obtain a significant understanding of the soil constraints with just three soil samples is absolute nonsense. That is one soil sample for over 500 hectares, particularly when all the desktop data identifies it as class 5 with the main soil type being sodosols.

In the guidelines of course it says that a full soil survey is not required unless the land is classified as BSAL or in classes 1–4. Now, this particular land, given the slope, was classified as class 5 because it has this sodosol soil type underneath it and it is environmentally sensitive land and that is of great concern. The major type of land degradation that we are likely to see manifest itself in this particular
type of environment is dryland salinity. Can we have the next slide, please?

And it's worth spending a few moments describing why I make this statement and to do that, we need to get an understanding of the changes that have occurred in

the landscape since European settlement. And I will describe to you how these landscapes were prior to the clearing for early agriculture, how they changed during that early agricultural period and what occurred to effectively rehabilitate those areas in the latter half of the 20th century. And then of course we'll have a look at what the potential ramifications are or the major changes to the landscape as a result of the accelerated approval and installation of renewable energy projects. Next slide, thanks.

So firstly, prior to the landscape, prior to 1750, the landscape was covered by deep rooted vegetation, essentially deep rooted trees and native grasses. In this diagram, the upper slopes are where the tenosols, as described in the report, which are undifferentiated sandy soils on the Narrabeen sandstone geology of marine origin, with high infiltration rates. As we head down to the lower slopes, the soil type changes gradually to the sodosols. By their very name, they are high in sodium.

The tree cover density is determined largely by the amount of water they have available to them. With the average rainfall around here being 600 mm per annum, we had quite a heavy natural tree population. So the type and density of tree cover changes as we travel towards the west from the coast. Rainforests on the coast eventually no large trees in the far western area. And these trees basically are water pumps. They prevent the shallow aquifer water table, that you can see diagrammatically represented there, from reaching the surface throughout the catchment area. Next slide, thanks.

25 So with early agriculture, there was obviously clearing of some native vegetation as soon as farmers started farming in the new colony, but it was probably not until the high horsepower tractors appeared in the early 20th century that large tracts of forested land could logistically be cleared and then farmed and much of this occurred between 1945 and 1970.

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The result of this clearing was that shallow groundwater was no longer being extracted by the deep rooted vegetation, either in the upper catchment or down on the lower slopes. Water accumulated in those lower catchment areas and once it rose to within 2 metres of the soil surface, it began to rise to the surface by capillary action and evaporated at the surface, depositing the salts that were dissolved in the groundwater on the soil surface.

Once the salts accumulate to a level where green plants can no longer tolerate the amount of salt there, the plants of course die and we have dryland salinity present. The key message in this is that dryland salinity is not a salt problem. Dryland salinity is a water problem.

So I used to work for the Soil Conservation Service for many years and in the 1990s we started a program to look at some of these dryland salinity outbreaks that were occurring. So once that problem was identified and recognisable, owners of affected land were advised to alter their management practices to whatever was required to lower those shallow water tables in the lower parts of the catchment. And there are basically a number of components of these altered practices. Firstly, the recharge areas had to be identified and installation of a network of piezometers, which are groundwater monitoring tubes that go in 3 or 4 metres into the ground, are required to identify where those water tables are. The second point is to plant interceptor belts of trees across the slopes to intercept the water before it accumulates down in the lower parts of the catchment. Also, the third point, utilising deep rooted crops and pastures to access that water 2 to 3 metres below the soil surface. Again, and maintaining surface cover to prevent and minimise evaporation on the surface.

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In areas that were devoid of vegetation due to the salt there, planting of salt tolerant species, for example, tall wheatgrass and puccinellia to assist with water extraction and ground cover. And of course, finally, and this point has already been made this morning about the need to be monitoring what's happening, we need to monitor those groundwater levels in those piezometers over time. Next slide, thanks. Yes, next slide again, thanks.

So what happens to the landscape after we have the installation of these wind and solar energy facilities installed? Most of that deep rooted vegetation of course is removed, as solar energy projects in particular, they prefer to maximise full access to the sunlight, so tree lots are not compatible with solar projects. Any remnant trees or planted tree lots will be removed to maximise solar interception.

Deep rooted plants of all species will be depleted, allowing the water table again to rise close to the surface and evaporation will recommence again, allowing dissolved salts to start to be accumulating at the surface of the soil once again and the dryland salinity problem will reappear under some of those areas. Next slide, thanks.

- Now, there's some things I want to particularly would like you to consider in relation to this. The land classification in this project area is classified as class 5 and this is a result of the risks due to acid soil, water and wind erosion, soil structural decline and dryland salinity. It's environmentally sensitive land. Now, I can't understand why when they're planning projects that they insist on a soil survey where we have BSAL land or land that is class 1–4 but if it's environmentally sensitive land, they can just go ahead and do what they like with it.
- The soil type of course is sodosols, inherently high in sodium in the B horizon.
 Should those topsoils in those areas be removed or interrupted, these soil types are highly susceptible to gully and tunnel erosion. I'll just run through a few of these things quickly because we're running out of time.
- In terms of fire control, grazing under these panels, to prevent the fire risk happening, you've got to keep the amount of pasture growth or dry matter under those panels at less than 5 tons per hectare. And if we look at a 30:30 principle, where you have a 30 degree day, 30% humanity, 30 km/h wind, 30 days since rain and 30 tons of dry matter, then you'll have a fire height of 12 to 14 metres. If

that's reduced to 5 tons, that fire height will be 2 to 2.5 metres.

I've got a few other things to say, Madam Chair, but in the interests of time, I think I'll leave it there and send you the remainder of my presentation.

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MS MILLIGAN: Well, we're very happy to have the rest of it in writing, thank you.

MR COLLESS: Thank you.

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MS MILLIGAN: All right. Thank you very much. So thank you to all [unintelligible 02:36:18] so far today, that brings us to our lunch break. Thank you to the speakers and thanks for respecting our schedule. We're doing well. So we do have now a lunch break but I would ask everyone if you can make sure that you're back by a quarter to one because our first speaker after lunch, who's Mr Henry Armstrong, will be speaking at 10 to and we will sort of keep to our schedule. So lunch break and please rejoin us at quarter to one. Thank you.

LUNCH

MS MILLIGAN: Ladies and gentlemen, welcome back, and thank you for respecting our schedule. Our next speaker – a bit echoey – this afternoon is Henry Armstrong. Thanks Mr Armstrong.

- 25 **MR HENRY ARMSTRONG:** Hello. Thank you for having me and giving me the opportunity here to make a presentation to the panel. I'll get straight into it. I have a few photos that are going to be played here, just illustrating some of the quantity of water that can come down through our area here.
- We're looking at the Birriwa, the proposed site is to the right of that photo as you're looking at it. Our family farm will receive 100% of the water runoff from the proposed solar farm. It is stated in the EIS that there will be an expected 5% increase in water runoff as a consequence of the PV modules. What will this actually equate to? And when erosion gullies form in the fragile soil, will ACEN be legally responsible for the damage incurred to farmers downstream?

The land use prior to the proposed solar project, as stated by ACEN, is both contradictory and inaccurate. This is of concern. ACEN has stated that the land within the study area is not used for intensive agriculture. This is untrue, to the point that much of the soil suitable for growing grazing crops for livestock, which is in fact grazed intensively, making it a very productive use of land for the land holder.

I don't believe that there has been adequate studies carried out to determine the effects of the leaching of chemicals from the industrial site. This should be of major concern for both the native flora and fauna in the area, plus the neighbouring agricultural businesses. Through the study for the EIS, it was found that most of the soil within the footprint of the Birriwa Solar project is fragile and susceptible to erosion. That's what ACEN has discovered in their EIS. This is of concern for the longevity of the project, and also as a neighbour, I would go as far as to say that the proposed site is not suitable and should be refused on that basis.

- Upon reading the EIS, I found the information to be ambiguous, misleading, with a
 bias to ACEN, inaccurate and inconsistent of detail throughout the entirety of the
 document. ACEN use vagaries to predict certain outcomes of the project with a lack of
 serious research undertaken. For these reasons alone, I implore the panel to refuse this
 project.
- 10 I'd like to talk about a few other topics; do you want to just play that video, and I'll just keep going so don't run out of time, hopefully. Visual impacts, negative impacts to neighbours, loss of agricultural land, workforce and accommodation, and strain on local services, plus some of the inaccuracies.
- 15 The photo montage that was provided by ACEN for the visual impact assessment and shared with neighbouring properties was inaccurate. The contrast and light in the photos were modified to make the PV models less noticeable sorry, less noticeable, and the cloud cover was accentuated to negate the glare from the modules. Will ACEN and be required, as they have stated in their EIS's screening projects, will they be required to undertake management practices to ensure the growth to full potential of any screen plantings?
- Some of the negative impacts to neighbours. ACEN have not taken into account the devaluing of neighbouring agricultural land through building a project of this size on our boundaries. There will be huge traffic increases in the local area. The extra traffic in the area will have negative impacts on the way we can run our businesses. It will affect stock movements, the safe and timely arrival or departure of commodities, contractors and merchandise, and the potential for negative health comes due to the extra dust and other associated pollutants from the industrial solar. The footprint of the project is too large, and will negate or devalue any possible sale of the – any possible sale of land adjacent to this industrial site.

Touching on just some insurances, most people have \$20 million public liability insurance. This is a massive, massive problem that farmers really have been left in the dark about. Some insurance companies will go to \$20 to \$50 million public liability. We're next door to a project that's worth \$1 billion. How can we safely run our businesses with that type of low insurance level to cover any mishap that may happen that could infect their business? We need some assurances from the government, and also the panel needs, I think, needs to take this into consideration. This should be of the highest importance.

The loss of agricultural land. The report justifies – and the report I'm referring to is ACEN's report – the report justifies the loss of ag land on the basis of the low grading being predominantly five to seven for the footprint of the site. With very limited land in the region rated between two and five, this puts added pressure on the rest of the region, as the land rated five to seven actually plays an important role in mixed farming operations. Thus making this type of land more valuable to our community, than what is stated in the report from ACEN.

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The report fails to detail how the loss of ag land is justified, and what this loss of ag land will mean for the region. Not to mention the cumulative impacts – not to mention what the cumulative impacts will be when taking into account the other projects that have been proposed in the region.

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Workforce and accommodation. If the proponents have trouble finding the workforce required, and they're talking something like 800, thus will this lengthen the timeframe of construction? If it does do that, I believe it's going to have more negative impacts for the neighbours, due to the increase of construction time. If the labour force were to take accommodation in the local short stay rentals, which is already happening, we've seen it in Dunedoo, Gulgong and Mudgee already, if they were to take local short stay rentals, what long term impact is this going to have for our region for tourism?

ACEN has already admitted, and this was in their EIS on page 172, ACEN has admitted to a labour and housing shortage in the region. How can the construction workers – as stated again, this is coming all from their EIS – ACEN would like their construction workers to work a six-day a week. They talk about assimilation into the community and the positive impacts that this project is going to have in our community. How can the construction workers have a positive impact in our community, when they're required to work for six days a week? How can they build any relationships, or have time to spend money to put money back into our community?

Just a bit on the strain on local services. I have concerns for the safety of my family, as we're neighbours to this industrial site, and other families living in the area of the proposed Birriwa industrial site. This stems from the potential for 1,000 predominantly non-locals working and living in an isolated location without the presence of police, and also the potential to overwhelm the current limited police and health services that we have available to us. I believe that projects of this nature should be constructed adjacent to a major highway, and not hidden away out in the back blocks where nobody can see them, and when something does go wrong, something major is going to go wrong.

- 35 There's been many inaccuracies in the submissions from ACEN, both in their EIS and their amended application. The main one is on page 196 of their EIS. They stated that there had been no fires within the, or near the area. They stated no fires have been recorded within or close to the study area. Now, if you're a local, you know this is absolute garbage. We've had the Sur Ivan bushfire, which would be predominantly approximately six to eight kilometres from the proposed site. That was in 2017. And we had the Barneys Reef bushfire, where there was a fatality, unfortunately. That is one to four kilometres away from the site. And they stated publicly that there was no fires. That's just one of the inaccuracies that I found, and there was many.
- 45 So to conclude, I'd like to reiterate that the panel should refuse the approval of the Birriwa Solar and Battery industrial site for the reasons stated above. Thank you.

MS MILLIGAN: Do you have any questions for him? Thanks, Mr Armstrong. I

noticed you raised a couple of issues there, which Mr Berge, I don't know when you come up later to speak to us, whether there's anything useful you could say on any of those topics? If not, if you'd like to sort of provide information later, that's fine, too. But Mr Armstrong raised the question about the use of the photo montage. He asked some questions about screen planting, which you may be able to address.

The question about workforce gaps, and if you actually can't recruit to your targets, will lead extend the construction period of the project? And can I just clarify; the last comment about the statement in the EIS of no fires, have you since addressed that and corrected that? Okay. And how have you done that?

MR BURGE: [Unintelligible 03:25:07].

MS MILLIGAN: Okay, in the response to submissions report. Okay. Thank you.Thank you very much.

Okay, our next speaker is speaking to us by phone. And our next speaker is Ms Ramila Chanisheff. And Ms Ramila Chanisheff is representing the Australian Uyghur and Tangritagh Women's Association.

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MS RAMILA CHANISHEFF: Hello, good afternoon, everyone. Thank you very much for the opportunity to be able to present here. My name is Ramila, and I represent the Uyghur community in Australia, mostly in South Australia, but Australia wide.

I'm not sure if everyone is aware of the Uyghur situation currently. East Turkistan, or what China has occupied since 1949, is called Xinjiang, or newfound territory. Now since Xi Jinping has come into power, millions of Uyghurs have been taken into concentration camps, which China will call re-education camps. Concentration camps are forced labour and slave labour. My understanding, the reason I'm speaking here, is solar panels that are being brought in by – from China rather, I'm not sure if you're aware that over 35% of the solar grade polysilicon supply comes from the Uyghur region, which means millions of Uyghurs are at the risk of losing their lives and being enslaved, to not only mine the polysilicon components for the solar grade solar panels, but they actually make the solar panels in Xinjiang or the Uyghur region.

Now, I know that New South Wales has got an Anti-Slavery Commissioner, and there are policies and processes in place to ensure no product should be coming into New South Wales that is made by slave labour. Unfortunately, my understanding is your solar panels are coming from the Uyghur region from China, which is highly likely that China does use Uyghur forced labour, or any other forced labour, whether it is also Chinese citizens who have been taken into prisons or encampments. So I want everyone in this room, especially the decision makers, to ensure that your products are not made by slave labour.

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We do understand as an activist as an Uyghur as well, that there are products out there that can be sourced. But thinking, listening to the previous speaker about the economic and – not the economic sorry, about the ecosystem damages to the area, my concern is

for the forced labour, There are 25 million Uyghurs in the Uyghur region. However, up to three million people have been taken into custody, have been imprisoned without charge, have been taken to concentration camps. And now, the concentration camps have turned into slave labour camps.

The slave labourers are enforced a slave to make these components, to make the solar panels, to make electric vehicles, to make electronic components to our phone and computers and all that. They also make the garments that we wear. So 85% of the cotton from China comes from the Uyghur region, and over 35% of the world's solar grade polysilicon comes from the Uyghur region. And solar panels made in China come from the Uyghur region by forced labour.

We have been talking about this for the past, since 2017, about slave labour. We have been engaged with the federal government as well as New South Wales slave labour, Anti-Slave Labour Commissioner, as well as the New South Wales government as well, talking about products that are tainted, in whole or in part, that is tainted by slave and forced labour.

Now, I would like this committee to discuss and to get educated and find resources as
 to why we are still sourcing products that could be tainted. Australia has laws in place, and there are new laws. The government is actually talking about a new federal
 Anti-Slave Labour Commissioner coming into effect. We hope that with his appointment, with his or her appointment, more processes, legislations and laws will be coming into place to ensure no product reaches Australia that is tainted by slave
 labour.

Please, please, I urge that the solar panels that you are bringing in or that you are engaging with China, will have blood of my family, of every Uyghur. Every Uyghur Australian that lives in Australia has got a family member that has been taken away, has been maimed, has been sentenced, has been made disappeared, and taken into these forced labour camps. We know that the labour camps separate people from their families, from their children, from their society, to ensure that the Chinese Communist regime keeps us separated from our culture and identity, and to erase us from the Uyghur region. So I implore every one of you to please consider this fact, as well as every other fact that's been placed and has been discussed today. So I would like to end here. If there are any questions I'd be happy to take them.

MS MILLIGAN: No questions, and thank you very much for your presentation, Ms Chanisheff.

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The next speaker who's here in person is Mr Lou Armstrong.

MR LOU ARMSTRONG: Good afternoon. Thank you very much again for the opportunity to speak with you. Most of you may not know, but the three Commissioners came around the Birriwa site yesterday, and we had quite good long discussions with them about some of the effects that we think will happen to us, and the problems that we have. So thank you again for giving us that time.

I would probably state that I think that it might be beneficial if you had another day sometime later on, to spend a little bit more time looking at the site and talking with us. So 20 minutes that we had probably wasn't quite enough. But that'll be up to you. Thank you very much.

MS MILLIGAN: Just to clarify the process for the rest of our attendees today, the panel did a site inspection yesterday morning. We were guided around the site by the proponent. But we were accompanied by three people representing community who observed the site inspection. And then in the afternoon, we had a number of invitations from neighbours to actually visit their property, and observe the site from their land. And so that's what Mr Armstrong's referring to. Thank you.

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MR LOU ARMSTRONG: Thank you for clearing that up. Yeah, my name is obviously Lou Armstrong. We run a family farm around 3,750 acres, just to the north of the Birriwa Solar site. My son has just spoken to people previous to me, so he's given quite an in-depth illustration of what we think will affect our enterprise in the future.

We run our place in a sustainable manner. We are proud of the way that we run the property. I think the property at the moment is in magnificent order, unless not through any accident. That's because we've been there for, well, I've been there for 50 years, our family has owned the place for 65 years, which is not quite as long as the Bowmans, who have been here for nearly 200 years, but anyway, we're trying to get there. But it's important to us to run our place in a sustainable way and to look after the country, because we want to pass that on to the next future generations in a better state than what it was given to us.

So we obviously have concerns about living next to a solar farm, that we will have problems which will make it difficult, which will cause us more difficulties in mitigating some of the problems that will occur on our farm, which have nothing to do with the way that we run our agriculture. It's something that will be brought upon us by an external force.

Most of what I'm saying has been said before, what I want to say was said before. I might hand it over to my granddaughter, she seems to be saying a fair bit more.

The cumulative effects of this project can't really be understated. And I think for you to take this solar farm in isolation, I don't think it's fair to us as neighbours. Because the solar farm can't operate, unless everything else follows it, e.g. EnergyCo with the transmission lines, that the solar farm won't be viable unless all the transmission lines come to export the energy that's created by the solar farm. So one, it's the chicken and the egg. So I don't think it's proper to just look at this in isolation.

And yesterday when we were driving around, most of the neighbours all made a comment about the roads, and the possibility of damage to the roads, and safety on the roads. I could see that ACEN would counteract that by saying, "We're going to have a road that will go straight up through the middle of the solar farm and we won't be using other roads." Now, that might be so. But the other proponents, EnergyCo and other people, will be using the roads. And if you remember driving the Birriwa bus route south, that road is in shocking state already. And you can imagine what it would be like with the other proponents using that road as much as they possibly have to.

5 The farm insurance is certainly a big, and indemnity is a big worry for us, as my son's already related to. The loss in the value of our farm is – a lot of these things are something that may happen five, 10, 15 years down the track. But I certainly don't want to live – if I had to sell out, I wouldn't go and buy a farm, another farm next to a solar farm, because that's what I'm leaving. And most of the people that I speak to, that are in that same situation, say that they certainly wouldn't buy a farm next to a solar farm. But this has been imposed upon us that this is what we have to do.

Just in conclusion, as I said yesterday, the sacrifice that I think our small little area of the Birriwa and our village, and the small community of Birriwa has to make to create energy to go over the range to supply the eastern part of New South Wales is far too great. I think what's being imposed on that is an unfair sacrifice. And I think this needs to be looked at very importantly, harshly by the committee, and I hope that you do so. Thank you very much.

20 **MS MILLIGAN:** Thank you, Mr Armstrong. Thank you. Let's move to our next speaker, also with us, and that's Angus Stuart. Mr Stuart.

MR ANGUS STUART: Thank you for the opportunity to speak at the meeting today.

- For those that don't know me, my name is Angus Stuart. I'm a director of a stock and station agency that has run in Dunedoo for over the last 110 years. We employ seven permanent staff, five casual staff, plus many other indirect people that work through either carrying or stock carrying and that sort of stuff.
- Firstly, I'd just like to talk about what effect it will have on our business immediately. The proposed solar farm takes in 100% clients of our own, they are, whether they are stock producers, which have sheep or cattle, all of those people that are currently where the farm is proposed are our clients. So we make our income through stock that come through our yards, what we sell privately to go everywhere around the world.
 We're extremely proud of the stock that we can produce in the Dunedoo area. We have a great reputation of producing some of the best lambs and cattle in New South Wales, something that we're proud of, and our producers should be very proud of.
- The land that's proposed there, as I said, are all our clients. It mightn't sound like it's
 that big, but when you put it in context of what's proposed in our whole area, I think that someone said that there was 15,000 hectares that was proposed in solar panels. So that then goes from being four, five clients, to maybe 15, 20 clients that that we all is our income, and we supply, employ people in our district. So it's the effect for us, and the flow on effect for all these things, is immediate. And how long does it last for?
 Even with the solar even with the wind turbines, is there indirect, obviously, that there'll be construction stages and that sort of stuff, they won't be able to run stock during those stages for any of the proposed farms. So all of those things which cover a huge area will have a great effect on us.

The running of – I did hear that ACEN said that the running of the sheep under the panels, and how that's been successful. The trouble that I find with that, is that how, what happens to the infrastructure that was there, like the wool sheds, the fences? How do these things – everyone knows that if you're running sheep, that you still need water troughs, you still need shearing sheds, you still need fences to actually get the sheep to where you want them to go. You need yards to drench them. What happens when we have a year like last year, where it's that wet you need to drench them four times a year? Like all these things, it's easy to say that you can just do it and it'll work fine. But the realistic is that it doesn't work that easily.

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Other businesses in town that I would have thought would be greatly affected would be any seed merchants, any fertiliser, people that sell fertiliser, the cropping people.
All that country out there, a lot of it gets cropped anyway, for pasture and pasture improved. How do you – is ACEN – how do we recuperate the loss of income through those sort of things, and the rural, other rural traders in town.

As far as stepping away from me personally, in our community it wasn't that long ago that we had another major government development that we lost 30 plus families to something that never went ahead. That hugely affected our schools, bus drivers, all businesses in town. Like the flow-on effect is huge. And little communities, like Dunedoo, we want them to thrive and prosper and that sort of stuff. But it seems like things get thrown against us. And if you lose families, and if you lose stuff out of your community, well, how are you able to – how can you prosper?

I went to school at Dunedoo. There was 400 kids there when I went to school. There's now under 170. So if the lack – if we lose more families in that area out there, I just think it's not great for us. The volunteer groups, the clubs, bushfire volunteers, who's going to do all these? When they lost people out at Sandy Creek, they had a bushfire out there, there was no one that could even get the fire brigade shed open, because there was no one there. So who mans these things?

I know that the town is quite sceptical, and you think that decisions are already been made, and whatever you say, these things go ahead without public consultation. I'm hoping that's not the case. But yeah, I certainly do you think it'll change the social fabric of what I came to Dunedoo for, and wanted to bring up a family. So hopefully, hopefully that doesn't change. Thank you.

40 MS MILLIGAN: Thank you, Mr Stuart. Thank you very much. So our next speaker 40 also in person with us today is Ms Emma Bowman, please.

MS EMMA BOWMAN: I have a presentation. Good afternoon Chair, Commissioners, ladies and gentleman. I'm a fifth generation farmer from Dunedoo, and I'm deeply concerned for the agricultural industry and rural and regional New South Wales and Australia, with regard to the rapid transition to renewable energy.

My community here in Dunedoo is at the centre of the current proposals for the Central-West Orana Renewable Energy Zone. Birriwa Solar project is just one such development. Next slide please.

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The people most affected by the rapid transition to renewable energy are those who have fed and clothed population for generations. The connection to the livestock we run and the country we care for is in our blood. That is why turning rural landscapes into an industrial setting is unfathomable for so many of us. To hear proponents and DPHI project assessors deem the impacts to surrounding landowners and communities as minor, insignificant, or negligible, is an insult to our way of life and the things we value most. Not only will our landscape be forever altered, the majority of these projects also pose an enormous threat to our personal safety, and that of our livestock, wildlife and environment. Next slide.

According to the parliament of Australia, social licence to operate has been defined as an ongoing acceptance of a project by the community, and other important
 15 stakeholders. During the exhibition period of the Birriwa Solar EIS, the Department received 89 unique submissions from the public, of which 85 objected to the project. The exhibition period for the amendment report elicited 45 submissions, all of which were objections. I believe that is enough evidence to suggest ACEN does not have social licence for the Birriwa Solar project. Next slide.

The DPHI assessment report states that the project would not significantly reduce the overall agricultural productivity of the region, and the site could be returned to agricultural uses in the future. The Department has calculated a combined development footprint of proposed approved and operational SSD solar projects within the Central-Western Orana region. The Department declares that the loss of 15,837 hectares of agricultural land represents a tiny proportion, 0.18%, of the 8.9 million hectares of land currently used for agriculture in the CWO REZ. It would result in a negligible reduction in the overall productivity of the region.

This statement is not only inaccurate, but misleading, as the CWO REZ is made up of two million hectares, making the actual percentage of agricultural land lost to solar within the CWO REZ boundary close to 1%. This figure does also not take into account agricultural land loss to transmission infrastructure, best projects, and proposed wind installations giving a false view of the potential impacts to agriculture in the area. Next slide.

The development footprint for ACEN's Birriwa Solar is 1,197 hectares. Whilst there are some exceptions, this amount of land within the Central-Western Orana region is capable of producing enough red meat – beef, lamb and/or mutton – to feed 1,300 Australians per day, based on a 100 gram average daily red meat intake. That's 474,500 Australian red meat intakes in a year produced from the land potentially being

4/4,500 Australian red meat intakes in a year produced from the land potentially being lost to the Birriwa Solar project. The same land is capable of growing enough wool to produce 27,500 pure wool jumpers each year. Imagine how many socks or wool blend garments that would be. Over the whole CWO REZ, imagine how many – sorry, that's more than six million average Australian red meat intakes, or 360,000 pure wool jumpers lost per year.

I do acknowledge the Department's statement that ACEN intends to continue grazing

concurrently with the operation of the solar project. I question how this will be possible, given the EIS states that farm dams may be filled in if it does not have adverse hydrology impacts, and there is a distinct lack of underground water in the study area. Next slide.

- The Department of Primary Industries' agriculture industry snapshot for planning August 2020 states: "The central west slopes and plains has the advantage of large areas of unfragmented land that allow the achievement of economies of scale for broadacre agriculture including irrigation. This, coupled with suitable soils and water supply, infrastructure, as well as access to markets in Dubbo, Orange, Sydney and Newcastle, make the sub-region one of the most successful and profitable in New South Wales."
- The same document also says: "Future land use planning must recognise the importance of agriculture to society, and the economy, and that the land and resources on which agriculture depend need to be protected, and managed to enable continued use of the land for agriculture. And land use planning needs to recognise that it is not only agricultural land with excellent biophysical characteristics that needs to be retained for agricultural purposes, but also those key secondary supporting industries which may be located on lower quality agricultural land, which is still potentially impacted by encroaching non-agricultural land uses." Next slide please.
- The same document declares: "There is a need to protect land for its future product productive capacity, particularly where there is a combination of biophysical assets such as water, topography and soils. The Central-West Slopes and Plains sub-region supports high value agriculture now, and will be important to sustain production of more specialised agricultural and horticultural enterprises into the future." I wonder what has changed in the four years since the New South Wales DPI agricultural land use planning team released this publication? Next slide, please.

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Could one of the major issues be the lack of understanding of agriculture and rural New South Wales by the DPHI staff who are assessing the proposed renewable energy projects? Or could it be the agreement signed by our state and federal governments regarding net zero completely overshadow and or disregard the importance of agriculture? Next slide.

On the 11th of February 2017, the Sir Ivan bushfire started approximately 15 kilometres east of Dunedoo. Due to intense heat and wind, the fire burned over 50,000 hectares of mostly farmland, a length of approximately 50 kilometres in the Dunedoo, Coolah and Cassilis districts within three days, burning just seven kilometres from the project area. Homes and infrastructure, livestock, habitat and wildlife were ravaged, the scars of which are still visible today. While there is no clear acknowledgement regarding firefighting limitations to date from the RFS bureaucrats, it is obvious to those of us who have been involved in previous firefighting efforts, that areas with renewable energy infrastructure will be avoided by planes and helicopters for operator safety. And ground crew access will be limited during bushfires that could well be a life and death situation, not only for livestock and wildlife, but for local residents. Next slide. How will we adequately protect ourselves, our homes, our livestock, our environment and our wildlife, and who will be held responsible for any losses incurred if protection measures are restricted by such infrastructure? Next slide.

The devastation and destruction left behind after catastrophic events such as the 1979 bush fire which burnt on the project site and claimed one human life, or Sir Ivan, are cleaned up by landowners and community members, the majority of whom are objecting to projects like Birriwa Solar. I believe it would be prudent for those assessing and determining the fate of such proposals to consider that fact. Next slide.

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The assessment report states that the Department notes a solar farm would otherwise be prohibited land use in the RU1 zone under a strict reading of the Warrumbungle LEP. However, based on a broader reading of the Warrumbungle LEP, and consideration of the objectives of the RU1 zone and other strategic documents for the region, the Department considers that there is no clear intention to prevent the development of a solar farm on the subject land. Is this statement suggesting that if I were granted a development application for a single storey house, but took a broad reading of the DA rather than a strict reading, it would be permissible to build a two storey house? Can the proponent also take a broad reading of the conditions of consent for the project, and therefore not be held accountable for any breaches?

I request, as a rate payer of the Warrumbungle Shire Council, that DPHI and the IPC take a strict rating of the Warrumbungle LEP, as I believe the document was intended. Next slide.

There are many more potentially monumental impacts of large scale renewable energy infrastructure projects like Birriwa Solar. Impacts on roads, transport and traffic, potential insurance liability impacts on agricultural businesses and premium increases for neighbours in the greater district. Next slide. The excessive use of underground water and effects on surface water, sediment and erosion. Next slide. Visual amenity, noise and environmental impacts.

Approximately 30 years ago I helped plant some of the trees within the project area. I do not believe it is acceptable to use the biodiversity offset scheme to claim already existing ecosystems as suitable compensation for the destruction of others. Next slide.

Not unlike the CWO REZ, ACEN's Birriwa Solar project has been thrust upon the district without prior knowledge, community input or consent. Consultation within the renewable energy transition has been found lacking, as evidenced by the Australian Energy Infrastructure Commissioner's Community Engagement Review, and more recently, the Property Rights Australia and NREN Community Impact Survey. Personally, I waited four and a half months for DPHI to respond to a query I heard about this project, and I only received that reply through persistence and dogged determination on my part. Next slide.

Warren Buffett once said, someone is sitting in the shade today because someone planted a tree a long time ago. I believe this is very apt for three reasons. Firstly, trees

do not grow overnight. Therefore removing existing growth for the purpose of solar panels is foolhardy and not environmentally friendly. Secondly, rehabilitating the Birriwa Solar site back to livestock grazing will take decades. Livestock need shade and shelter provided by mature trees. Lastly, I believe the rapid transition to renewable energy and its potential negative impacts on agriculture and rural and regional Australia, is short sighted and fraught with danger. I urge the Commissioners to refuse consent to the Birriwa Solar project. Thank you.

MS MILLIGAN: Thanks, Ms Bowman, thank you very much. So we move now to our next speaker, who's also speaking to us on the phone, and that's Ms Carolyn Emms. And Ms Emms is speaking to us as a representative of Rainforest Reserves Australia.

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- MS CAROLYN EMMS: My concern about Birriwa farm is, I mean, where the
 proposed site is, which is 15 kilometres west of Dunedoo, it's prime agriculture, but
 it's also habitat for koalas. So we're looking at the clearing of 405 hectares. So it's
 actually a large scale, enormous, centralised battery system as well. 600 megawatts for
 two-hour duration. All that infrastructure is quite inefficient.
- 20 And I think for our organisation, we're a conservation group, and we're seeing the flaws that are in the national interest, public interest, that this needs to be carefully considered. We object to this proposal. We actually don't consent to prime agriculture and conservation areas being cleared for this industry. I think a solar facility should not lead to loss of productive sites. So agriculture, loss of vegetation, habitats of species.
 - Look, this is koala habitat. They are endangered. And you've got the loss of cultural heritage. I mean, it goes against the values of climate action, really. It's not climate action to destroy the photosynthesis properties of agriculture, the soil properties. A solar facility should really be located well away from floodplains, National Parks, watercourses, wetlands.

So look, a concern I have also is the lithium batteries. I mean, the battery storage can catch alight without warning. They're extremely complicated to extinguish. So why risk it? Lithium battery fires released dangerous, toxic fluoride gases, with unknown consequences. So I mean, what about the fire brigade? Do they have the expertise to put out these fires? And then you've got the fire risks.

So is it responsible to propose such a large toxic battery system in these areas? The impacts to koalas, regent honeyeaters, bats, and existing vegetation should not have to be sacrificed. It's not fair. And if you asked Australians, or if they knew what was proposed, I think they would be appalled. I would like to ask you that question.

Consultation. What do you mean? We don't find there's any consultation at all with this industry. Because it's not consent. When they held an information session, it's just, this is your information. This is how it's going to be whether you like it or not. So I'll just keep going, because I only have five minutes.

I have sent you in one of the slides, if you can locate it, it just says high quality

farming land should not be sacrificed for a large scale industrial solar factory. The visual amenity will impact tourism and community. Why is this speculative proposal even considered? The reason I say speculative is, I'd like to ask you please, just to set aside 15 minutes to look at the YouTube I sent you of Professor Stephen Wilson. We have held events at JCU, James Cook University, where professors have spoken. And basically, he states it's not going to work. And he explains the power system, how it works, and why he thinks Australians' current plan A is destructive and dangerous. Please look at that YouTube. Will you look at it? That's my question. Its destructive and dangerous.

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In his brief talk, Stephen actually shares insights from his professional and academic experience in the worlds of university research, commercial strategy and government policy. So please, I do appeal for you to look at that presentation.

15 Another consideration is contaminants in soil from existing solar panels. So I've given an example. But soil analysis – panel runoff is from beneath the soil panels. Soil analysis control, it's actually that has been taken from the site uphill, where the runoff doesn't reach. So you're likely to increase lead levels into the water systems. It is really concerning. The environmental impacts are very, very severe with this.

There is a lot of evidence, as you probably would have been advised, or if you've done your research, of existing solar panel degradation. And one was in Bobinawarrah site in October 2023. So it just clearly shows the solar panels breaking down after 10 years.

- So we're also finding with our research, that climate change induced rainfall reduction is and there is a drying out effect, that there's enough research out there now. So like, why, why are we doing this to our country? We're looking at a national crisis. It's not in the public interest. If the whole community is going to benefit, which it won't, because it hasn't benefited our communities at all, in fact, the long term harm that it's caused our wildlife, soil degradation, and they're just locked up industrial sites. So you're not even our Indigenous friends aren't even allowed to access these sites. Why? Because it's an industrial site. That's why. To call it a farm is anathema, really,
- 35 So let's go to social licence. Next slide. Or find that slide, if you can –

MS MILLIGAN: Ms Emms, Ms Emms, it's Janett Milligan speaking. And I understand that you haven't finished. I'm just wondering, I've confirmed that we have received in full your submission, and so I'm going to ask you, if you perhaps could wrap up your presentation to us? Because you have used the time allocated. But be assured that we have your written submission, and if there's anything else you wanted to send to us, material that you haven't had a chance to present to us now, we would be very happy to have that too.

45 **MS EMMS:** You want me to share these slides with you, the submission?

MS MILLIGAN: No, no.

it's not a farm.

MS EMMS: Is that what you said?

MS MILLIGAN: No, I'm sorry. What I'm saying is the allocated time has been used. And I'm sorry that we don't have the ability just to extend the time. What I'm saying is we do have your submission, and anything else that you were about to say to us, but we've run out of time, we would be very happy to have that sent to us also. But I guess I'm just asking you if you could finish at this point. Thank you.

MS EMMS: I think the submission already covers a lot of ground. But there's
probably another 500 issues with this. So look, if you accept the submission, I would love it if you did have a look at Stephen Wilson's, and the social licence aspect. But look, I can – but the decommissioning is an issue. Because there's enough research out there in America and other areas that they actually will not be able to – it's a pretty word, decommission, but they will not be able to recycle these. Why do we know that?
Because it'll be too expensive. So why are we just placing rubbish all over our landscapes for the next generation? And I could probably just end it there, with that. I mean, this is a dangerous precedent.

MS MILLIGAN: Okay, thank you, Ms Emms. I'm sorry if you felt rushed, but in the fairness to all speakers, we do try and keep to time. And as I say, again, if there's material that hasn't been able to be presented, please send it to us. We certainly will receive it and look at it. So thank you very much.

So our next speaker also on the phone with us this afternoon is Ms Lynette LaBlack,
 and she is speaking on behalf of Save Our Surroundings, in particular the Riverina and
 the National Information Network.

MS LYNETTE LABLACK: Thank you for the opportunity to speak to you as a directly impacted long suffering neighbour of fake green environmentally destructive industrialised solar at Bomen, Wagga Wagga, as a friend of an extremely distressed neighbour of another environmentally vandalising industrialised solar nearby Bomen, Wagga Wagga, who is now in legal pursuit of the solar host, Wagga Council, and the typically dodgy solar developer.

I am also one of numerous electricity consumers suffering from the cruel torture of skyrocketing renewable energy prices, the total opposite of the government solar guideline aims and objectives of cheap, reliable energy. I'm also a mother and grandmother who is alarmed and distressed from experiencing the practical impacts of industrialised solar, which defies all thought principles of ecologically sustainable
 development; including no social licence, totally ignoring the precautionary principles, despite the inevitable serious, irreversible toxic solar contamination risks, and smashing intergenerational equity by unjustly, irresponsibly and deliberately trashing our life sustaining uncontaminated soil heritage and vital healthy wood sources by this nonsensical ecocidal fake green energy poverty swindle.

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After five years of repeatedly raising the toxic contamination impacts and providing evidence supported by expert witnesses, this dodgy department continues to spew out false propaganda and peddle unsubstantiated codswallop, such as no solar contamination unless panels are ground to a fine dust. Outrageously, this was accepted by the Independent Planning Commission, when this clearly is designed to enable money hungry developers to continue their ruination of Australia, with no scientific basis whatsoever. This is nothing but confection, made up evidence so lacking in integrity that no weight can be placed on it.

ACEN's Birriwa Solar is part of the disingenuously fudged New South Wales infrastructure roadmap, scandalous fake green renewable solar wind energy poverty grift and Ponzi scheme, that's shambolic policymaking, dangerous to grid operation, and totally mad. Obviously imploding as we speak, amidst the threatening blackouts, [billionaire 04:12:00] scandal, industry abandoning Australia's skyrocketing renewable prices, including hypocrite Twiggy Forrest ditching Australia, heading to Arizona, and energy consumer backlash as non-transparent energy regulators, AER and AEMO, cling to CSIRO's sunk cost trickery and brazen deception, ever increasing their draconian control, unjust demand tariffs, and sponging on everyday consumers to prop up the totally illogical, weather dependent system of energy deprivation and rationing, in a country naturally blessed with far superior, reliable, efficient, secure and plentiful 24/7 energy resources.

 MS MILLIGAN: Ms LaBlack, I'm sorry to interrupt you. It's Janett Mulligan here, Chair of the panel. Look, I recognise your feelings and your passion on this. Can I just give you a little reminder perhaps of some of the language you're using, and the way in which you're speaking about some of the people who are involved in the project; proponent, department, assessors, whatever. So please continue, we are interested to hear what you're saying to us, but maybe if you can just reflect on that as you go forward. Thanks very much.

MS LABLACK: Then I'll continue.

30 **MS MILLIGAN:** Yes, please.

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MS LABLACK: The weather dependent stuff can't deliver power on demand, only guarantees economic misery, environmental destruction, and community disruption. There is now universal hostility to pointless pathetic part time power such as Birriwa Solar electricity generating works, and its incapable batch of junk, which would never be capable of powering 262,000 average households as they claim. There is a huge discrepancy, as the proponent must have presumed that the solar farms capacity factor is of the order of more than 36%, when no solar installation in the world has such a favourable capacity factor. A figure of a pathetic 17% capacity factor should have been used for true figures, as calculated from actual long term AEMO operational data for the operational solar farms in eastern Australia.

These huge discrepancies require explanation from the proponent. It's pointless to presume that the proposed battery will somehow magically make up for the shortfall. We need to remember that a battery energy storage system, as with any other battery, is not a generator. In order to supply energy, the battery has first to be charged with energy. Given the huge discrepancies found above, there is no opportunity for Birriwa Solar to ever have any spare surplus to charge the battery energy storage system unit. The obvious solution for genuinely clean, safe, reliable, efficient, secure 24/7 Australian power that would protect agriculture and nature, would be an equivalent nuclear power plant with minimal environmental impact. One 75th of this 1,300 hectare Birriwa site equalling only 17.3 hectares. This is your net zero no brainer.

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I've come to the conclusion that the irresponsible ideologically driven approving bodies do not care one bit if they our life sustaining soil and water is poisoned, or if we die as a result of these illogical toxic, contaminating, fire hazardous disasters. The renewable swindle is all about the money, only persisting to rip off the public due to flawed planning, fudged approvals, authoritarian dictatorship. And this can only be described as gross negligence. A lack of care that demonstrates reckless disregard for the safety or lives of others, which is so great, it appears to be a conscious violation of other people's rights to safety.

I welcome the comments from Mr Ambrose, who must be well aware of the moral hazard being unjustly inflicted on local councils and communities by the government, with any contamination or pollution of land and water caused by these anti-Australian, unreliable, weather dependent, energy poverty, environmentally destructive, toxic contaminating solar and wind electricity generating works such as Birriwa Solar, which will inevitably result in irreversible environmental harm.

The Department's claims of limited impact beyond this high erosion risk site and return to agriculture, both of which are well proven elsewhere to be completely false. My own Bomen Eunony Valley community has been seriously afflicted by ecocidal solar junk against our will since 2019, with conditions not met, testament to the typically irresponsible environmental destruction, extensive water runoff and erosion directly caused by industrialised solar. From our own practical experience, Birriwa Solar is not clean, not green, not sustainable, not about protecting nature, not caring for country, not zero emissions, and absolutely not for the greater good.

It's Australian negative, with no genuine benefits whatsoever. As neighbours, to wrongly approved industrialised solar amidst food production, we are now personally faced with a disastrous public liability dilemma, making the recently adopted South Burnett and Fraser Coast Council motion absolutely vital for all councils to adopt, with an immediate moratorium until all of the essential points are in place. As today, there is no scientific rigor, no engineering facts, no integrity, and no ethics.

One of those points includes the indemnity of neighbours who are forced to become victims of these large scale disasters. There are numerous additional omissions which the Department has intentionally ignored, including the 30 metres to mitigate heat island effect, which is only relevant to a tiny 13 hectare site in Arizona. This was clearly debunked by Peter Hall and Professor Greg Barron-Gafford during questioning for the Shepparton Solar hearing. And yet here we see it, repeated ad nauseam, and supported by the Department.

Practically dealing with massive toxic waste burden from common events like hail and fire has not been included by the Department. The claims of waste generated

throughout the operation of the solar energy project being typically negligible, does not take into account common hail storms and fire events. And I also note ACEN proudly describing its other taxpayer subsidised obnoxious fake green solar projects this morning. I particularly note that the already constructed New England Solar Uralla has used cruelly tortured, slaved by the supply chain Jinko solar panels, and presently constructing the Dubbo Solar. No doubt that's also reliant on unethical solar also, and probably the destination of the three B-double rollovers within a month, littering the Denman area with extensive broken toxic contaminating solar panel waste, spilling into running water adjacent to growing land.

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MS MILLIGAN: Mrs LaBlack, it's Janett Milligan, I'm sorry to interrupt you once again. Look, in the interest of fairness in allocating our time this afternoon, I'm going to ask you to finish there. But can I just say if there's additional material you'd like us to consider, please provide it to us. Or please consider making an additional submission to the panel. And thank you very much for taking the time to present to us this afternoon.

Our next speaker is in person, and it's Mr Grant Piper. Thank you Mr Piper.

MR GRANT PIPER: Good afternoon everyone. Good afternoon Chair and the panel. Welcome to our home and our community. And my name is Grant Piper. I live about 45 K east of here. And we joined the ACEN Valley of the Winds wind farm, if it ever gets built. And I can fully endorse the previous speaker's comments about the ramifications, and also the fruitless efforts of dealing with ACEN over the last three odd years. Now –

MS MILLIGAN: Mr Piper, I didn't really introduce you adequately, I'm sorry. I should have told people that you're speaking on behalf of the Uarbry Tongy Lane Alliance Incorporated.

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MR PIPER: Yeah, that's correct, I am.

MS MILLIGAN: And the National Rational Energy Network. Thank you.

35 **MR PIPER:** Yes. Thank you. ACEN is a foreign owned company that does not have the good of local residents at heart. ACEN is here to take advantage of our generous subsidy structure and book profit overseas in a low tax jurisdiction, or sell on to another operator down the road. These facts are the basis for how the project should be viewed and assessed.

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Solar is grossly inefficient; it only produces on average 20% of its installed capacity, and that's from AEMO 2022 data. The whole of life including disposal, emission, environmental effects needs to be considered, and not just the operating emissions. With a short working life, solar would have to be replaced several times during the life of the conventional thermal power station, incurring even more environmental and economic cost. This leads to the conclusion that solar is counterproductive to the stated aims of cheap, reliable, environmentally friendly power.

Due to the distributed nature of solar and wind, lengthy additional transmission lines are needed, which further adds to the environmental cost, and which until now has been unnecessary. The addition of the large storage batteries destroy any environmental credentials further, due to their whole of life, environmental impact and short life. Batteries produce no power at all.

Currently, the CWO REZ has 54 listed projects totalling 14.6 gigawatts of installed capacity. That's over 1,000 turbines and nine million solar panels, yet it is approved for 4.5 gigawatt with an application to increase to six of dispatchable power. So this confirms the need to massively over-build at great environmental, economic and human cost, to hopefully achieve only one third of the installed capacity.

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Projections are to increase the installed capacity to 20 gigawatt in the REZ. So Birriwa Solar and the other projects are just the beginning, and should not be considered in isolation. Future expansion of projects and the total impact on communities, environment, agricultural production and cost to citizens must be considered, and compared to alternative methods of bulk power production, including conventional thermal plants.

We cannot trust the New South Wales government's intentions regarding farming and food production, when they remove, in inverted commas, "in a manner that does not threaten food production," end inverted commas, from the Emissions Reduction Act 2023 Section 3(1)C, which is touted to codify the 2015 Paris Agreement Principles, and they are attached on the back of my document, which does include this proviso. So the Paris Agreement said that renewable transition should not impact food production. The New South Wales Government took that phrase out of the Emissions Reduction Act. And not many politicians, parliamentarians knew it when they voted for it, as best we can find out at this stage. I see it as a further extension on the war on farming in practice, and the experience of the other landowners here and elsewhere, confirms that.

GenCost and the AMOISP are deficient, and cannot be quite as reliable information in regard to least cost or most efficient development pathway. Both have been debunked by experts and organisations working in that field. Further, the CWO REZ was removed from the ISP framework by the New South Wales Energy and Infrastructure Act 2020, yet EnergyCo and New South Wales government staff and officials still justify the need for the REZ and transmission as being required to meet the ISP.

The National Electricity Law, and there's a segment attached also, does not prioritise emission reduction over the other long standing objectives of: price quality, safety and security. These objectives must be at least equal in priority when assessing novel power generation projects. The National Electricity Law amendment added emissions targets as an objective only in September '23. And the next phrase then hedge their bets by including, in inverted commas, "likely to contribute tribute to reducing emissions."

It does not sound like the legal advice was confident that these projects would reduce emissions, and so they included a legal out for future indemnity when the current government policy is finally publicly acknowledged to be absurd, destructive and counterproductive.

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Large solar harvesting plantations such as the ACEN Birriwa project have no electrical power engineering merit, economic justification nor environmental benefit, and should not be approved. Any questions?

MS MILLIGAN: No. Thank you very much. Thank you for your presentation. Thanks, Mr Piper.

- 10 We had one more registered speaker who was going to talk to us in person, but I understand that she's not ... she's a teacher. Okay. All right. I'm sorry about that. Okay, we will ensure that she knows that she can send material to us. All right. Thank you very much.
- 15 So thank you all. That brings us to the end of our registered community speakers today. And so there are two things before we finish. I'm going to go back to Iwan Davies from the Department, and give him another opportunity to address any of the issues he's heard today, which he can address and provide additional information on, or to make any last comments to the panel. Thank you. So Mr Davies.
- MR DAVIES: Thank you Chair. There are three questions that I do want to address that were raised by the community today. So thanks everyone for their input. There are questions from Sally Edwards and Emma Bowman. The first, and the clarify, both Sally and Emma asked about the figure stated in the Department's assessment report regarding the comparison between the project and agricultural land in the central west around the region, including the 8.9 million hectares stated. That is the 1,200 hectares development footprint representing the 0.01%.
- So that 8.9 million hectares was obtained from a New South Wales government commissioned report in 2016. I don't think that is a confidential document, and I'm happy to providing a link to that, if not. And Emma Bowman quite rightly pointed out, or I suppose Emma questioned the 8.9 million as well. I do want to make a correction in our assessment report. We stated 8.9 million within the CWO REZ. It's 8.9 million within the Central-West Orana region, not only the renewable energy zone.
 - Significance. Sally asked about how the Department assesses significance. So more broadly, the Department undertook its assessment in line with the requirement to the EP&A Act, including Section 4.15. And it has given detailed consideration to a number of statutory requirements including Section 1.3 of the Act.

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Regarding how we assess, or how the Department assesses significance, happy providing further information, but ultimately, I'd like to rely on our assessment reports, but to talk through a few matters that have been raised today regarding that significance.

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Visual. So the Department recently released an updated large scale solar energy guideline. And included in that is a technical appendix regarding the visual impact assessment. We've gone to absolute detail to ensure or aim to ensure that subjectivity

is removed from the assessment of significance of visual impacts, and that the significance of those visual impacts are evidence-based.

Regarding noise and the significance, the noise policy for industry is the New South
Wales government's policy for these types of projects. And there are strict criteria within that, that the outcome must adhere to. And the significance is included in those policy for industry.

Regarding traffic and significance. Ultimately, the Department does rely on government agencies, or the roads authorities, being Transport for New South Wales and Councils, noting that the roads authorities agreed to the proposed road upgrades. It did take us quite a while to get to an agreed position, and the Department's requested further information from the developer or the applicant on several occasions before the roads authorities were comfortable with the road upgrades proposed.

- And the more high level and a couple of other matters that have been raised, and regarding the significance of those; agriculture, heritage and fire and bushfire. The Department is again reliant on the advice that is provided by the expert agencies, including RFS, Fire and Rescue New South Wales, Heritage New South Wales, DPI, Agriculture and the like. But I hope that gives a flavour of the Department's tests of significance for a number of matters raised today.
- MS MILLIGAN: Mr Davies, can I just come in there, just to reflect back. So you're telling us that in a couple of matters, the use of the word significance is not our day-to-day sort of understanding of what that might be. There is a technical understanding of what significance is, and that is measured and reported, so there is no subjectivity in it. That goes down and also includes noise policy. You're saying that you were relying on the definitions used by some other agencies, for example, by traffic, heritage, agricultural, and fire agencies. And so you're not really able to tell us what their technical definition of significance is?

MR DAVIES: Thank you. Your opening statement was correct. And then regarding the definitions of agencies, I believe I advised that the Department relies on the information that is provided by those technical agencies. And noting that those agencies have agreed to the potential impacts such as those road upgrades to mitigate those impacts.

MS MILLIGAN: Thank you.

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40 MR DAVIES: Regarding permissibility, which Sally Edwards and Emma Bowman raised, that's a fair question. Ultimately, the answer is that the Transport And Infrastructure State Environmental Planning Policy allows renewable energy to be developed on rural land. There's a lot more detail I can get into there, and I note the terms being used of strict and broad, but ultimately, the project is permissible on the land zoning.

Those are the three items that were that were addressed by Sally and Emma. I don't have anything further to add.

MS MILLIGAN: You have no lasting comments – no last comments for us before you finish?

5 **MR DAVIES:** I'll rely on the presentation I gave earlier, thank you.

MS MILLIGAN: All right. Thank you. Thank you very much, Mr Davies.

MR DAVIES: Thank you.

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MS MILLIGAN: So at this point, and last speaker for the day, I'm going to ask Mr Berge and Ms Hafez have is if they'd like to come back, again, address any of the questions you've heard today that you are in a position to answer, and to leave us with any other information you'd like to before we finish. Thank you.

MR BERGE: Thank you. We would like to thank the Commissioners and the members of the community to provide some closing remarks to today's public meeting. And we have welcomed the time our neighbours, stakeholders and community members more broadly have taken to participate in today's meeting, online with the submissions, and with their feedback on our proposed project to date.

I just would like to acknowledge Henry Armstrong's comments, and we are taking these on notice, and we'll provide a response in the following days.

ACEN Australia recognises the importance of early and effective engagement, community and stakeholders. The New South Wales government's Department of Planning, Housing and Infrastructure considers the project would not result in any significant impacts on the local community or the environment, and any residual impact can be managed through the implementation of our recommended conditions.

Performance indicators will be developed for each management plan in consultation with stakeholders, and would be monitored through throughout the project life span. An adaptive approach is proposed, allowing ACEN Australia to manage and respond to changing circumstances and new information all the time through ongoing monitoring and periodic review of mitigation strategies, allowing for modification if required and appropriate.

We have heard today several concerns that have been raised with us. We, like the Department, are satisfied that the potential social immediate impacts can be effectively
managed through conditions requiring monitoring. We want to maximise local employment and business opportunities, and deliver the most appropriate accommodation solutions, the most appropriate accommodation solutions, for our workforce. Our preference and priority are to employ locally first. Many stakeholders, including the New South Wales government and developers, are focused on investing
in skills and training so that more local people can benefit from opportunities created by renewable energy. And now to Sarah.

MS HAFEZ: Thank you Cedric. ACEN Australia is a signatory to the Clean Energy

Council's best practice Charter for Renewable Energy Developments. The Charter is a set of voluntary commitments by Clean Energy Council members to engage respectfully with the communities in which they plan and operate their projects, to be sensitive to environmental and cultural values, and to make a positive contribution to the regions in which they operate.

As Australia embraces the opportunities a growing renewable energy industry brings, we understand the importance of sharing in the benefits that our projects can provide. And I discussed so in my opening remarks, trying to beat that second bell.

In finalising our closing remarks, I wish to speak to the Central-West around a Renewable Energy Zone. The CWO REZ was declared on 5 November 2021, and was selected by the New South Wales government due to the region's significant potential for renewable energy infrastructure and regional development. The Birriwa Solar and Battery project will contribute to the security of renewable energy supply in New South Wales, while reducing greenhouse gas emissions over its operational life.

The project is consistent with the New South Wales Electricity Infrastructure Objectives in the Electricity Infrastructure Investment Act of 2020. Importantly, the project will contribute to the continued growth of renewable energy generation and storage capacity in the Central-West REZ. At ACEN Australia, we believe in a more sustainable and inclusive, resilient world where we all have access to affordable, renewable energy. We develop, construct and operate large scale renewable energy projects, helping Australia transition to a clean energy future. We're all stewards –

MS MILLIGAN: I'm sorry, can I just remind people?

[Calling out from audience]

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30 **MS MILLIGAN:** Okay, I'm sorry, Ms Hafez, for that interruption. I know that people feel strongly about these issues, but we need to progress with respect.

[Calling out from audience]

35 **MS MILLIGAN:** Okay, Ms Hafez, would you like to continue?

MS HAFEZ: I might repeat that last point, sorry. We're all stewards of the future, and have a responsibility now to minimise our overall impact on the natural environment in everything that we do. We care about what we do, how we do it, and we genuinely care about each other. We want to make a positive and enduring impact, and are excited for the future of the Central-West Orana Renewable Energy Zone. And we're proud that our Birriwa Solar and Battery project could be the start of the REZ's success.

45 ACEN Australia's Birriwa Solar and Battery project will contribute to Australia's domestic and international commitments of renewable energy development, including the New South Wales government's targets of 50% renewable energy by 2030. We agree with the Department that the project would result in benefits to the state of New South Wales and the local community, and is therefore in the public interest and seek the Independent Planning Commission panel's approval. We thank you all for your time today.

5 **MS MILLIGAN:** Thank you, thank you. Just before you finish, and you may want to give us this information on notice, but the issues that I raised earlier, are there any sort of quick and easy answers to some of those questions? The question about if you have gaps in the workforce, will the construction period be extended? Please don't answer if you don't have the information available.

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MR BERGE: Yes, I would like to take this one on notice, please.

MS MILLIGAN: On notice, okay. There was an issue about a six-day week, and a question about how that will be managed so that workforce do integrate, do become part of the community. Again, if there's anything you can say on that?

MS HAFEZ: No, we're happy to make mention of some of the successes that we're seeing in our Dubbo Solar project, which also is working the workforce there six days a week. We do take pride in our workers being part of the community. Since September last year, our EPC contractors, PCL Construction, and our subcontractors, as well as our ACEN Australia staff have been volunteering on a rotating basis delivering meals for the Gulgong community as part of Meals on Wheels. That's every Friday. And since we've began volunteering, we've delivered over 450 meals to the community.

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We also ensure and take pride in our staff, our subcontractors, our workforce, participating in community events that we have been proud to sponsor under our Social Investment Program. For example, this long weekend we're a proud major sponsor of the Henry Lawson Festival, and our EPC subcontractors are also going to be attending the event. In October, we were the largest donors for Pink Up Mudgee. So our Dubbo Solar construction site, our EPC and our subcontractors either donated, coloured their hair, shaved their heads, and raised over \$35,000 to Pink Up Mudgee, raising much needed funds for the McGrath Foundation for regional breast care nurses. For our

Birriwa Solar project, I don't see that that commitment will waver in any way.

MS MILLIGAN: Okay. Thank you for that. Am I right in assuming that your company would have a modern slavery policy?

MS HAFEZ: Yes, we do. I would like to spend some time, if I can, addressing the comments that we heard earlier.

MS MILLIGAN: Yes, a small amount of time, and I had one other question.

MS HAFEZ: Sure. We do thank the comments earlier from the Australian Uyghur
 Women's Association, and their commitment and ongoing advocacy to raising awareness of solar panel issues and modern slavery, and slave labour of the Uyghurs who have been internalised to be imprisoned, who have been coerced to work in solar panels in China, in northwest China, and the Xinjiang region.

While we are not yet required to report under the Commonwealth Modern Slavery Act of 2018, we have started to incorporate modern slavery into tender documentation for procurement of our assets, where modern slavery risk is considered a material risk. As an example, for Dubbo Solar, in the tender process, we included a need for our EPC and solar panel providers to address modern slavery risks as part of their proposals. This requirement included providing detailed information on supply chain resources, providing modern slavery statements, and providing information to demonstrate risk of modern slavery in the supply chain. Each tenderer is assessed and questioned on the information provided, so that ACEN Australia can ensure modern slavery risks are minimised throughout our projects.

Additionally, just in final statement, ACEN Australia selects tier one PV panel suppliers which meet relevant international and domestic standards. ACEN Australia's assurance processes also include the engagement of a third party auditor to visit manufacturing facilities. And while the primary purpose of this is to support quality control requirements, modern slavery risks are also incorporated in these processes.

MS MILLIGAN: Okay, thank you. Thank you for that answer. And can I just ask one more? Are you in a position to say anything on the topic of procurement more generally, and your policy to buy local? We heard last week, particularly from one of the local government authorities, a concerned about the fact that that commitment and that policy weakens as you go down the contractor chain. You may not be able to answer that at the moment, so please, feel free to take that on notice too. But it's a question about how does the community feel confident, that that buy local policy and commitment will actually be honoured, I suppose, by contractors' subcontractors, subcontractors.

MR BERGE: I think it would be fair for everyone if we took this one on notice, so we can provide further information and more and clearer information in the next few days.

MS MILLIGAN: Thank you for coming back to speak to us a second time.

MS HAFEZ: Thank you.

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MS MILLIGAN: Okay. So thank you. That brings us to the end of this public meeting into the Birriwa Solar farm. Thank you to everyone who's participated in what is a very important process. Duncan Marshall, Suellen Fitzgerald and I have really appreciated your input. And just a reminder that it's not too late to have a say on this application. All you need to do is click the Make a Submission portal on the website, or send us a submission via email, via post. The deadline for written submissions is five o'clock on Friday the 14th of June. So it's over a week away.

In the interests of openness and transparency, we'll be making a full transcript of this public meeting available on our website in the next few days. At the time of determination, the Commission will publish its Statement of Reasons, which will outline how the panel took into consideration the community's views as part of our decision making process. Finally, a quick thank you to my fellow Commissioners, Duncan Marshall and Suellen Fitzgerald, thank you. And thank you to the people that have been watching today's meeting. And from all of us here at the Commission, enjoy the rest of your day and many thanks.

Good afternoon.

>THE MEETING CONCLUDED