



**New South Wales Government**  
Independent Planning Commission

## **TRANSCRIPT OF PROCEEDINGS**

RE: HILLS OF GOLD WIND FARM (SSD-9679)

### **APPLICANT MEETING**

PANEL  
CLARE SYKES (CHAIR)  
JULIET GRANT  
DUNCAN MARSHALL AM

OFFICE OF THE IPC  
STEVE BARRY  
GEOFF KWOK

APPLICANT  
SCOTT DE KEIZER  
AREF TALEB  
JEN MEEK  
JAMIE CHIVERS  
TIM MEAD  
DAVID MOIR

LOCATION: IPC, SUITE 15.02 LEVEL 15, 135 KING STREET, SYDNEY NSW 2000

DATE: 11:00 AM – 12:00 PM  
MONDAY, 15<sup>TH</sup> JANUARY 2024

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## <THE MEETING COMMENCED

MS SYKES: So, we might get started then. Good morning and welcome. Before we begin, I would like to acknowledge the traditional owners of the land on which we meet the Gadigal people of the Eora nation, and pay my respects to their elders, past and present. Welcome to the meeting today, to discuss the Hills of Gold Wind Farm case SSD-9679. Currently before the Commission for determination. The Applicant, Hills of Gold Wind Farm Proprietary Limited, a project entity owned by Energy Australia and New Zealand, proposes to develop a 390 megawatt wind farm approximately 60km southeast of Tamworth, near Nundle, Hanging Rock and Crawney in the local government areas of Tamworth, Upper Hunter and Liverpool Plains. The proposed project involves the development of up to 64 turbines up to 230m high, a 100 megawatt battery energy storage system, a 330 kilovolt transmission line connecting to Transgrid's existing transmission network at Wallabadah and other associated ancillary infrastructure. So, my name is Clare Sykes. I am the Chair of this Commission panel, and I'm joined by my fellow Commissioners, Juliet Grant and Duncan Marshall. We're also joined by Geoff Kwok and Steve Barry from the Office of the Independent Planning Commission.

In the interest of openness and transparency, and to ensure the full capture of information, today's meeting is being recorded and a complete transcript will be produced and made available on the Commission's website. So, this meeting is one part of the Commission's consideration of this matter and will form one of several sources of information upon which the Commission will base its determination. It's important for the Commissioners to ask questions of attendees and to clarify issues whenever it is considered appropriate. If you are asked a question and are not in a position to answer, please feel free to take the question on notice and provide any additional information in writing, which we will then also put up on the website. So, I request that all members here today introduce themselves before speaking for the first time, and for all members to ensure that they do not speak over the top of each other, really, just to ensure the accuracy of the transcript. We will now begin, and may I first ask each member joining as representatives of the Applicant to please introduce yourself now. Thank you.

MR CHIVERS: I'm Jamie Chivers, Managing Director of Someva Renewables.

MR DE KEIZER: Scott De Keizer, Head of Development for ENGIE Australia and New Zealand,

MR TALEB: Aref Taleb, a project developer with ENGIE Australia and New Zealand.

MR MOIR: David Moir from MOIR Landscape Architecture, the visual expert.

MR MEAD: Tim Mead, Development Director at Someva with Jamie.

MS MEEK: Jennifer Meek, Senior Legal Counsel at ENGIE ANZ.

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MS SYKES: Thank you. We have a meeting agenda here and thanks very much for your introductions. Now we'll sort of move on to the overview of the application, and a presentation about the Hills of Gold Wind Farm. Thank you.

5

MR DE KEIZER: Excellent. Firstly, thanks for your time. We'd like to start with an acknowledgement as well of country. So, I'd like to acknowledge that we're currently on Gadigal land, the Eora nation. And we're also discussing a project that sits on the land of the Gomeroi people. ENGIE has a reconciliation action plan and is working with First Nations people across our organisation and across all of our projects in our portfolio. We pay our respects to elders past, present and emerging. Just like to quickly draw your attention to the artwork commissioned by ENGIE. This is done by a First Nations artist, Emma Johnston, in the Hay area. We understand the critical contribution that First Nations people make to bettering our projects, through their storytelling, their talent, and their unparalleled understanding of the land. Just moving on to the agenda. We received the agenda, so, thanks for that. We have ensured that we follow the agenda points raised. Noting that we have 15 minutes for overview, but we're covering the whole agenda point in this, so it will likely go longer than 15 minutes. Where there's discussion points, obviously we're happy to take on discussion points. And we'll just - we've series of content we'd like to get through naturally. I'll remind her of time if we've got additional content that we haven't got to.

MS SYKES: Yes. That's no problem. And we may also, intervene, if we have questions as we go along.

MR DE KEIZER: That's great. I think - just to know we've got quite a bit of content we'd like to cover. So, regarding key issues outlined, we'll discuss the visual biodiversity, traffic and transport in this overview first up. And then there's also a supplement visual noting it's key to the discussion we will have on the reinstatement of the turbines. That's where David Moir will come in as our landscape architect and unpack the project and the DPHI assessment, noting we're using DPHI now because of the change of name, which happens quite regularly. The key focus of our presentation and subsequent discussion will be around the justification for the reinstatement of 15 of the 17 turbines removed in DPHI's recommendation. I think that's the agenda that will follow and we can move on to the next slide, to give you an overview of ENGIE. We're the largest utility in the world, span across 170 countries and have been operational for 190 years in various forms and various names. As it relates to renewables, ENGIE has circa 40GW of installed renewable energy capacity across 31 countries.

In Australia, ENGIE has operated for almost 30 years. And our first contribution to renewables in Australia was in 2005 with the Commissioning of the Canunda Wind Farm. This is an asset we still own and operate. And then it's now alongside the Willogoleche Wind Farm, which was Commissioned. ENGIE has more than four gigawatts of renewables in development in Australia, of which 2.9GW sits in New South Wales. ENGIE's net zero aspirations ensure our long-time commitment to

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- renewables in Australia. I think this is evidenced by our early retirement of the Hazelwood Power Station and the subsequent \$660 million commitment to the rehabilitation of that site as we transition. I'd like to also note here ENGIE's partnership with Someva on this project. Someva is a family-owned New South Wales wind farm developer. Someva has supported this project since 2017. Progressing approvals, working with landowners and community, and providing technical and commercial advice with the unified goal of getting this project to construction and beyond. I'll just hand over to Aref now to give an overview.
- 10 MR TALEB: Thanks Scott. We have a map on the right hand side there with the project area, with the transmission corridor to where it would connect into the Liddell Tamworth line as a visual reference. The project could be up to 62 turbines if the 15 are reinstated, with a maximum tip height of 230m, which would be enough renewable energy to power up to 163,000 New South Wales homes. The project was carefully sited due to its strong wind resource, compared to other locations in New South Wales and its proximity to the Liddell to Tamworth transmission line. Which means it can connect in and provide renewable energy now. Compared to the New England Renewable Energy Zone, which isn't expected to come online until 2030. In terms of the site itself, the area has historically been used for grazing and forestry and can continue to be used for those post operation of the wind farm. It's a low population density area in the surrounding communities of Hanging Rock and Nundle, and David will touch on this in his section, but it's a low visual impact wind farm compared to others in New South Wales. We also benefit from being close to regional centres like Tamworth and the Upper Hunter, which have traditionally supported power industries and are well positioned to support the transition to renewable energy with this project. Next slide, please. In terms of the State and Commonwealth targets. So, we've got the New South Wales Electricity Strategy and Infrastructure Roadmap and the associated targets, and the Commonwealth target of 82% renewable energy by 2030. These are quite ambitious targets, and we're going to need every dollar of investment, job reduction and emissions and megawatt to get to those targets. What we can see on this slide is the Hills of Gold contribution with up to 62 turbines, if the 15 are reinstated and how it contributes to those ambitious targets.
- 35 Next slide, please. One of the agenda items on the IPC agenda was economic and community benefits. We have a long history of engagement with the community and Councils and establishing our benefit sharing programmes. We initially started with 2500 dollars per turbine per year into a community enhancement fund. We then increased that to 3000 per turbine per year, which comes to a quantum of 6.5 million over the 30 year expected lifetime of the project. And in recent discussions with Council and the community, we're actually at a \$6,000 per turbine per year of benefit sharing commitment to the community. With DPHI's recommendation, that would see about 8.5 million going to the community and Council over a 30 year lifetime. If 15 turbines are reinstated, that's an additional \$2.7 million over the 30 year life of the project that could benefit the community and local Council. ENGIE is also in the unique position, as we have a retail business, that we've been able to offer a locals energy discount to the surrounding communities, which is really beneficial in a time

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of cost of living. The other thing I want to touch on and Scott mentioned this is our commitment to First Nations communities. ENGIE, very early on in the project design has started a consulting the Gomerai Native Title Applicant and the Nungaroo Local Aboriginal Land Council. And we've now reached a position where we've  
5 offered those two groups collectively \$90,000 per year for the life of the project. I'll now hand over to Jaime to talk about engagement.

MR CHIVERS: Sorry, next slide please. So, as Scott mentioned, we've been involved in the project since 2017, which is when we introduced The Hills of Gold to  
10 the Nundle, Hanging Rock, Crawney communities. Our focus at the time was to engage residents in close proximity to the proposed project. So, residents within five kilometres. Through one on one engagement. And then the broader community around Nundle and Hanging Rock through town hall and public style forums. Just as  
15 a demonstration of that, we had recorded the number of interactions we'd had, up until we launched our amendment report and we had had around 400 interactions with neighbours within five kilometres, and almost 800 within the broader community outside of five kilometres. I think that was really a key driving factor, to  
20 the level of submissions and the interest in the project that we saw through the public exhibition. And a great place for us to have learned from those directly through those interactions, but also through the submissions to learn what those key issues were that we have subsequently gone on to address in project amendments. And I'll take  
25 you through those project amendments shortly. But the key issues, as is common in a lot of wind farms, but specifically to this project, were traffic, biodiversity, justification for why this project in this particular location, visual impact, as well as the socio-economic opportunity and impact associated with the proposal.

I wanted to take you through a bit of a history of how we then amended the proposal to adapt to some of these issues that we learnt through community, but also agencies  
30 as we went along. Next slide please, Geoff. When we, lodged our scoping report, we had the intention to include more landowners in the project, and we had 97 turbines. We were engaged with those landowners as part of the proposal. Through that engagement and subsequent surveys, we reduced the number of turbines by 27 -  
35 apologies, there's a typo on this, that 23 should be 27 - down to 70 turbines that were assessed and sought in the environmental impact statement. We removed those 27 turbines as some landowners chose not to be involved. Other landowners were quite  
40 close to the project, and we decided to remove turbines for proximity and biodiversity constraints that we learned through the survey efforts leading up to the environmental impact.

40 MS SYKES: So, they're the red dots?

MR CHIVERS: The red dots. And as you can see, some of those are outside the current project area because the project ultimately didn't include them in this, they  
45 chose not to be included.

MS SYKES: Yes.

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MR CHIVERS: I think probably what's worth noting, and we'll talk about the complying development certificate that is referred to as DAD 01, as part of the DPHI assessment and recommendation for removal of turbines that is labelled DAD 01. It's near the cluster of red turbines you can see there. We were engaged very early with  
5 that landowner in late 2017, sharing layouts, commercial terms, and we hope to bring them into the project. That didn't eventuate. So, when we launched our - by the time we lodged our scope report that they had chosen to - sorry, by the time we lodged our EIS they'd chosen not to be involved.

10 Next slide please, Geoff. Following the submission of the Environmental Impact Statement. We had a very strong engagement with the Biodiversity Conservation Directorate, BCD. I would just want to say we really enjoyed working with them, they were very clear, they were regularly available, they provided written feedback, and made it very easy for us to understand what additional surveys and what they  
15 expected of us in any revision. That has - that engagement resulted in 23 turbines being relocated where we felt we could meet their requirements for impact. We reduced - we relocated turbines that had been considered high collision risk impact, mostly as a result of bird and bat collision risk. We relocated around threatened ecological communities and native vegetation. It's a little bit hard to see on the screen  
20 here, but the dots represent sort of the general movement in turbines. And that was not in one phase. That was in sort of multiple phases. We had multidisciplinary workshops where wind engineers, civil engineers, ecologists, needed to interact to determine that these changes were feasible.

25 MS SYKES: So, the blue dot is sort of where I guess if we look at both plans, that blue dot is where they've remained intact. And then the green dot has been where a blue dot has moved. Is that -

MR CHIVERS: The blue dot is where it was and where it is and - sorry the green dot  
30 was where it was, and the blue dot is where it is. So, where you see the green dot with nothing around it, it hasn't changed.

MS SYKES: Okay. Got it.

35 MS SYKES: Yes. So, the previous slide's all blue dots and then a green dot is where it's moved.

MR CHIVERS: I think the blue dot is as lodged.

40 MS SYKES: Yes.

MR CHIVERS: And the green is - sorry, is it?

MR CHIVERS: Yes, because you can see some haven't moved, they're green.  
45

MS SYKES: Yes. Okay.

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MR CHIVERS: But then you can see blue which are quite close to green.

MS SYKES: Yes. Okay.

5 MR CHIVERS: It may, it is, in some locations the blue is just a little bit on top of the green.

MS SYKES: I see so that's one that's been shifted?

10 MR CHIVERS: Yes. Those changes were in some cases quite small and in other cases several hundreds of metres.

MS SYKES: Yes. Okay.

15 MR CHIVERS: It also allowed us to create greater separation between the turbines, which was a BCD issue for barrier risks around bird collision.

MS SYKES: Okay.

20 MR CHIVERS: So, where we couldn't meet what we thought to be BCD requirements, for biodiversity impact on high collision risk turbines, we removed them. If you don't mind hitting the next slide. That resulted in six turbines being removed. And you can see they're mostly around the bottom. You see they're in a threatened ecological community of snow gums. They are also close to one of the  
25 non-associated dwellings at 69, which was referred to in the Department's assessment report as the reason for turbine 24's removal. So, we did remove some turbines down there for that non-associated dwelling. As well as to the west of the site, there's a red dot close to NAD 72, 98, and also in a TEC, threatened ecological community, we were very conscious of sort of cumulative impacts because the DPHI  
30 were telling us they were looking at cumulative impacts quite closely.

MS SYKES: Okay. So that's where we get to the 64 turbines now?

MR CHIVERS: Exactly.

35

MS SYKES: Okay. Yes.

MR CHIVERS: So, that gets us to the end of all of the amendments and the 64 turbines that ultimately were assessed.

40

MS SYKES: Okay.

MR CHIVERS: Transport I mentioned was another key issue raised. Initially, we had proposed oversized over-mass, through Nundle and along the purple dashed road, which is Barry Road. And we had proposed an upgrade at the Devil's Elbow, a double hairpin, to avoid that double hairpin but to go through a crown reserve. We learned through engaging with Crown, Tamworth Regional Council, the community  
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had a lot of concerns around a heritage item there, the Black Snake Gold Mine. That was an old gold mine, we assessed Geotech conditions. We looked at design. We thought we could avoid that direct impacts. But at the end of the day, it felt that there was an overwhelming weight of concern for that heritage aspect. And the decision  
5 was made to remove that as a proposed route and to select the Crawney Road as an alternate preferred route for oversized over-mass. That's the green line that runs down to the western part of the site.

10 MS SYKES: I see - Yes. Okay, so it was the purple.

MR CHIVERS: It was the purple.

MS SYKES: And now it's the green. Yes.

15 MR CHIVERS: That's for oversized over-mass.

MS SYKES: Yes.

20 MR CHIVERS: The blades and the cells tower sections.

MS SYKES: Yes.

MR CHIVERS: But it has the benefit of splitting other construction traffic, which would be B-doubles, light vehicles with workers to access a site by two areas, which  
25 splits the traffic volumes and reduces to the communities, in particular on Barry Road and Morrisons Gap Road, which is a lifestyle block area close to the north of the project site. We, part of the amendment was also to propose two options around Nundle. Again, to seek to try and reduce impact to the community within the township. And three access options off Crawney Road onto the site, which is in this  
30 bottom area of that map. Which we engage with the Gomeroi, the Nungaroo Local Aboriginal Land Council, Crown lands as it's a Crown land lot, Tamworth Council on site, to help understand where - what concerns they had and what were their preferred options, which in the end has been recommended as option B, which we have no concerns with as a condition. We're happy to proceed with.

35 MS SYKES: So just for clarification, it's probably good just to ask as we go along, I think. So, the Devil's Elbow - that route, the purple line, it will not be used at all. Or it's just that bypass area or that will be used for some types of vehicles?

40 MR CHIVERS: Yes, it will be used for some types of vehicles. The upgrade proposed for the oversized over-mass which took a different route around, and it was a new road section is no longer proposed. This is an important aspect to the community. So, if there's any other questions? I've made that my last point is that  
45 ENGIE is still committed to the safety upgrades that were proposed at the existing Devil's Elbow double hairpin to improve safety for public road users on that as part of the road.

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MS SYKES: And what in general is that the upgrade. Is it just widening the hairpin?

MR CHIVERS: Yes, it's widening the hairpin and it's installing improved safety barriers at some of the turns.

5

MR MARSHALL: Won't encroach into the Crown land?

MR CHIVERS: Road reserve.

10 MR MARSHALL: Did you look at B-doubles going through the hairpin?

MR CHIVERS: Yes.

15 MR CHIVERS: B-doubles will have the option to use both routes as a heavy vehicle route.

MR MARSHALL: Yes.

20 MR CHIVERS: I think we have split the traffic; I believe it's 65% through Crawney Road. The remaining 35% up Barry Road.

MR DE KEIZER: Thanks for the opportunity to provide an overview of our project. We hope this gives you some important context for what we believe is now the most important section of our discussion today. Firstly, it's worth noting that ENGIE  
25 supports the majority of DPHI's recommendations from their assessment, including accepting the removal of turbines 24 and 42. Therefore, this section will be focusing on the key concerns we have regarding the assessment and how they've greatly reduced the positive impact that this project could deliver towards this ambitious energy transition that New South Wales is on, as well as to local communities  
30 surrounding the project. These concerns are related around these four points. The removal of turbines 53 to 63 relating to visual impact to DAD 01, which is a non-existent CDC approved dwelling. The removal of turbines 9 to 11 relating to visual impact. That's for NAD 72 and 98 as well as 33. And then the removal of turbine 28 relating to biodiversity impact. And then finally, the inability of the project to  
35 rebaseline biodiversity offsets pre-construction following a detailed design process that will happen later in the project.

Next slide. This slide is just before moving into the details of our positions. On our key concerns, we wanted you to have this context when we're weighing the broad  
40 public interest. So here we see on the basis of the recommended at the top versus the 62 turbine wind farm that we see as powering an additional 48,000 homes with clean, green, renewable energy. The further reduction of CO2 by 170,000 tons per annum. An additional 90 megawatt towards the New South Wales 12 gigawatt target and in excess of \$50 million of benefit to local economy. And then the bottom one which is  
45 important in today in the cost of living crisis we are in is that Hills of Gold can deliver 9% decrease in its levelized cost of energy with the inclusion of these 15

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turbines. So again, for context, we'd like to quickly take you around the map. Geoff, I might need your help here with the cursor or there's a map also here, just for -

MS SYKES: Thank you. That's great.

5

MR DE KEIZER: We'll call out the relevant dwellings referenced in our discussion today in the positions below. First of all, NAD 05, which you'll see is in the Hanging Rock cluster. This has an existing dwelling that is occupied. NAD 67, which is to the east, this is an existing dwelling which is unoccupied and on the same property as DAD 01. NAD 72 as we go down to the southwest, this is an existing dwelling which is occupied.

10

MS SYKES: Which one's that?

15

MR DE KEIZER: Down southwest, yes, that's right. And then NAD 98, which is on the same property as NAD 72 and is unoccupied. And then finally DAD 01 which is the subject of considerable amount of the content in the presentation below. So, the approval has relied upon, in fact, a complying development certificate or a CDC. It's issued by private certifier and is legally bought and opportunistically located with a view to frustrate the project. It is the site of a formerly rejected development application by Council. And there is no existing dwelling at DAD 01, as the CDC has not been acted on, and there is no indication to date that it will ever be acted on. I think that takes us through the context of the receptors, if you've got any questions?

20

25

MS SYKES: Just clarifying. So, you said NAD 67 is unoccupied.

MR DE KEIZER: NAD 67 is an existing dwelling unoccupied and on the same property as DAD 01.

30

MS GRANT: Okay. When was the CDC issued?

MR DE KEIZER: On November the 12th, 2020.

35

MR DE KEIZER: Which was post our submission of our Environmental Impact statement for adequacy. We weren't aware of that until after public exhibition, so several months later.

40

MR MARSHALL: In raising doubt about the legality of that approval. Wondering where that issue goes.

MS SYKES: What would you specify that would be more around the legality of that? Your view on legality of that?

45

MR DE KEIZER: Well, I think the original development application that went to Council was rejected. It was rejected on grounds that it didn't have - couldn't prove valid access. It was rejected on the grounds that there was unclear bushfire risk or potential bushfire risk that wasn't addressed, and it was rejected on grounds of the

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potential to create - to not be in the public interest due to conflicts with other land use as a result of submissions made as part of the exhibition of that application. A number of submissions were made calling out the wind farm and the benefits of the wind farm would bring to the community. And that the impact this development application at the time run through Council would have on the wind farm and broader (indistinct).

MS MEEK: I might just add, just in response to your question as to what that means. We're going to be talking to this at length and we'll also detail in our written submissions. But in our view, this goes to the weight that should be given to that should be given to that dwelling this weighing exercise from Taralga as to the public benefit versus any visual impacts to that dwelling entitlement.

MR CHIVERS: To add to the CDC aspect, which was sort of the next phase of DAD 01. No neighbour was notified of that and so we weren't aware of it. Neighbours who were hosting turbines were unaware of it. And once we were made aware of it, we were not able to appeal that CDC.

MS GRANT: Is there not a notification process required? I know you can't object to a CDC, but I think there was a notification process required.

MR CHIVERS: That's right.

MR DE KEIZER: Are we happy to move on from this? Yes. I guess as a general statement to this, we start to move into the position. We believe DPHI's assessment around visual impact to be both legally and technically flawed. And if we can take you down our sort of cascading hierarchy of thought related to the flawed assessment. Firstly, DPHI's assessment overstates the visual impact associated with the removed turbines. This will be further unpacked by David Moir, our landscape architect. And then let's for a second assume that the technical visual assessment is correct - is accurate sorry. The weight applied to the visual impacts versus the greater good is out of balance. Thirdly, as a last resort, in the event of determination to not reinstate turbines is come to, the IPC has a clear option and power to instate a voluntary land acquisition clause to the consent.

MR MARSHALL: Voluntary or involuntary?

MR DE KEIZER: Voluntary. So, I guess we'd like to further establish that the IPC has the power to form and give effect to the position determined through this process. A power supported by case law with Warkworth Bulga. It's our request is that the IPC form its own view. And it's our hope that after our discussion today and the subsequent process to follow that the view is to reinstate 15 of the 17 turbines recommended for deletion by DPHI.

MS SYKES: Just for clarification on the map, when you say reinstate the 15, could you just explain the other two sort of where -

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MR MARSHALL: The two that are not to be.

MS SYKES: The two that are not being reinstated, where are they?

5 MR DE KEIZER: 24 and 42 on the -

MR MARSHALL: 24?

10 MR DE KEIZER: If you look - the circles around the - the yellow circles around. So, 24 is down south. Yes. And then 42 is a bit further (crosstalk).

15 MS MEEK: Just on that as well. If you turn to - we have actually covered this in our appendix. So, on slide 36 we've explained the basis for which we've accepted the removal of those two turbines.

MS SYKES: Okay. Thank you.

MS SYKES: Perfect.

20 MR DE KEIZER: Yeah it's in the Appendix if you so wish to cover it off.

MS SYKES: Okay. Thank you.

25 MR DE KEIZER: Okay. I appreciate there's a lot of text on this slide. But for the IPC's benefit of having this either before or after you can go back and read every word, but just like to establish some case law around the points we're making regarding the balance of assessment. The case law doesn't support DPHI's approach regarding DAD 01, NAD 72 and NAD 98 to call out justice precedents conclusions in the Taralga decision. The correct approach is to weigh up, in aggregate, the broad  
30 public interest in establishing renewables as against any private disbenefit to the community and specific landowners.

35 Which takes us to the next slide. Moving from that commentary on case law and how this has been applied specifically to DAD 01. Firstly, we disagree with the overstated impact assessed at DAD 01. Secondly, it's clear that undue weight has been placed on that overstated visual impact with little to no regard to the public interest. Thirdly, the very little weight should be applied to a CDC approved dwelling, particularly one that was denied through a formal DA process and then obtained a CDC after the project was announced. And finally, the impact to the state of environment should be  
40 assessed at the time of determination. Therefore, very little weight should be given to the CDC, which hasn't commenced and is unlikely to commence DAD 01. The weight applied in DPHI's assessment to a dwelling that doesn't physically exist at the date of the decision, hasn't been appropriately balanced against the compelling public interest. So, we make a visual for you. You can see the - we can see that DAD 01 is  
45 outweighing these great benefits on the side here currently, so, it's part of our discussion now. So, to discuss an appropriate framework to apply in considering the weight of impact of an approved dwelling versus the greater public interest,

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particularly for a tenuous CDC approved dwelling. In an earlier slide, we demonstrated the benefit of reinstating all 15 turbines. Here we're showing the benefit as it relates just to the 11 turbines associated with DAD 01. It's quite clear to see the imbalance in the recommendation to remove these turbines. At DAD 01

5 where there's no existing dwelling with a legally flawed dwelling entitlement, decided to frustrate the project and it is unlikely to be acted upon against the benefit of 38,000 homes powered by a clean, renewable energy, reducing CO2 emissions by 136,000 tonnes per annum and injecting \$39 million into the local economy. It's clear that the positives far outweigh the impact of DAD 01.

10

MS GRANT: When you say it's, you know, it's unlikely that there was no indication that it ever will be acted on. What gives you that understanding?

MR DE KEIZER: The approval has been there for close to three years now.

15

UNIDENTIFIED SPEAKER: Three years, yes.

MR DE KEIZER: And it expires (crosstalk) next year. And there's been no indication otherwise that they will be acting upon the approval that they've got.

20

MR CHIVERS: No work has been done to date, there is no change to the physical environment. At our last assessment.

MS MEEK: I think it's also worth touching on the access issues. I think you might be - Jamie or Aref might be best placed to talk to that in terms of what's required to construct the dwelling.

25

MR CHIVERS: Yes, it needs to have legal access and so that legal access now is over private property without that.

30

MS GRANT: So over whose private property? Your private property?

MR CHIVERS: No, over a neighbour's property. It was a host of turbines.

35

MS GRANT: Yes.

MS SYKES: Just to clarify, some of the figures there. When you say 110 jobs created. So, the project as put forward with 64 turbines in the application has, I think 200 - 200? Or is it -

40

MR CHIVERS: 200.

UNIDENTIFIED SPEAKER: 211.

45

MS SYKES: 211? Yes. So, you're saying that that 211, actually 110 are taken out?

MR CHIVERS: I can talk to this.

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MS SYKES: Yeah. Just trying to understand the metrics around - because I assume that in the construction of a wind project that there would be a sort of 200 required regardless for a certain amount of time, you know, as it gets constructed.

5

MR CHIVERS: Yes. In the application, we talk about 200 direct jobs created during construction, 30 operational jobs created through the life of the asset and an additional over 400 indirect jobs created through the local stimulus to the economy. So, the comparison is between all those jobs added up. Call it over 600. And this is a pro-rata for the number of turbines removed.

10

MS SYKES: So three categories. Okay.

MR CHIVERS: Exactly.

15

MS SYKES: So that 110 jobs is the impact. So, around the 600 it would then become sort of the 490.

MR CHIVERS: Sure. Yes. We could probably say direct and indirect.

20

MS SYKES: Yes. Okay. Thank you.

MR CHIVERS: And likewise with the dollars in the local economy, we pulled out wages and profit specifically, not CapEx, capital expenditure, which will be a much greater number. So, we're calling it local wages and profit, as well as direct payments to landowners hosting the project and community benefits directly paid.

25

MS SYKES: Okay. So that's more wages and profits?

30

MR CHIVERS: Yes.

MS SYKES: Okay.

MR DE KEIZER: Next slide. So, on a similar vein again, through the inappropriate weighting of impact applied to DPHI's assessment at NAD 72 and NAD 98 - they're those ones down on the - yes. We see local investment of 15 million more jobs and thousands of homes powered by clean, renewable energy erased for the sake of an overstated visual impact to a single landowner. And further context that will be provided by David as well. So, consistent with the Taralga decision and consistent with precedent wind farm approvals such as Rye Park and as a last resort to the Hills of Gold determination, we would request a voluntary land acquisition condition be applied to this consent. Whilst we believe there is adequate cause for the IPC to form a view that sees the reinstatement of the turbines in question, we also believe in being pragmatic and see that a voluntary acquisition condition would provide an option for the IPC to introduce balance back into the determination. In the event that nothing is addressed in this determination to provide a dangerous precedent for the industry. Australia is undergoing a transformative energy transition at both State and

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Federal level. Every megawatt counts. This determination, if unchanged, could pave the way for significant reduction in the megawatts that will be approved.

5 MS GRANT: So, the way this would operate - then what you're saying is if down the track, you were able to have a landowner agreement or acquire the site that DAD 01 sits on, you could then come back and amend the DA proposal to then reinsert the -

MR DE KEIZER: Reinsert the 11 turbines.

10 MS GRANT: that would have otherwise been removed, is that -

MR CHIVERS: We have a -

15 MR DE KEIZER: So, I'm just reading from a Rye Park consent, which is a consented wind farm, which is currently under construction that has -

MS MEEK: In the Appendix on slide 40. (Crosstalk).

20 MR DE KEIZER: That's got an acquisition consent clause in development consent. And sorry, until we get to it - but basically, it's for a period of up to five years from the commencement of construction - there you go - commencement of construction of the applicable turbines, which are in the table below. The residents at R38, which is the owner of that land, may request the Applicant to acquire their land and then there's a process for acquisition.

25 MS MEEK: And that's why 37 to 39 also include a sample that's been provided by (indistinct).

30 MR CHIVERS: To be clear, the condition would allow the turbines to be constructed and should the landowner wish to be bought out then they have a right to call that, and there is a valuation methodology that needs to consider, their property and the approval that they might have. So, the CDC, for example, may need to be considered in that valuation methodology.

35 MS GRANT: The turbines still proceed -

MR CHIVERS: That's right. Yes.

40 MS SYKES: Can I just clarify that point on the slide where we spoke about - the one we were just on before we jumped to the appendix. Slide 22. That the point around turbine 53 to 63 are the most productive turbines.

45 MR DE KEIZER: We've got a slide where we can demonstrate some values that indicate that, if you want to wait till then. Otherwise, we can -

MS SYKES: The next slide.

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MR DE KEIZER: It's the next slide. There we go. You don't have to wait too long.

MS SYKES: Here we go. Great. All right.

5 MR DE KEIZER: Happy to forge on?

MS SYKES: Yes.

10 MR DE KEIZER: Okay, great. So, in contrast to DPHI's comments that wind farm design and layout doesn't depend on the same extent as mineral resource this is an incorrect assertion. As Justice Preston acknowledged in Taralga, it's necessary for wind farms to go where the wind is. And with minor shifts in turbine locations, we can see significant impacts to the cost of power and project viability. Um, so you can see this map. We can clearly see the red on this map that indicates high yielding  
15 turbines. Red isn't all over the map. It's just in that specific location along that ridge line. So just to be clear, just because there's a few colours on that, the red refers to the background shades, not the shade colour of the dots.

20 MS SYKES: Yes. And that refers to the bar on the left here.

MR DE KEIZER: Yes. That's right.

MS SYKES: North south corridor. Are you saying are the more valuable.

25 MR DE KEIZER: Exactly. So, I guess a very real example of this is a demonstration when looking at turbines 53 to 63. These turbines on - the green turbines you can see on the ridge line there. These turbines on average yield 22% more per annum than the other remaining turbines. Also, it's worth noting that these turbines sit on top of the ridge line, flat, mostly exotic pastures of low biodiversity value as well. So, by  
30 including these turbines in the wind farm, we would greatly reduce the cost of energy per megawatt produced, increase the total volume of energy to contribute to Australia's renewable energy transition.

35 MS GRANT: How does it reduce the cost when the cost - the energy goes into the grid, the price is set - how can you equate specific turbines to cost of energy?

40 MR DE KEIZER: So, what we do is we can look at the yield of every individual turbine on the farm. So, some will yield more. Some will yield less. We also do a workup of the capital cost associated with each turbine, so we can start to see what each turbine contributes in terms of its levelized cost of energy at a turbine by turbine basis. So, some of those turbines are lower yielding ones will drag the cost down because they're high yielding, low cost. Some of them will pull the cost of energy up because they might not yield as much. They might be higher cost to develop. So, through that exercise, we can then come to a, I guess, an average cost of  
45 what our wind farm, the Hills of Gold Wind Farm, will produce energy at.

MS GRANT: So that's cost or benefit to you not cost to the retail.

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MR DE KEIZER: It's the cost that will go into the wholesale energy price. So that's what we can add an absolute minimum we need to sell energy into the grid to be profitable.

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MS GRANT: Yes.

MR CHIVERS: From a market and a competitive position and how the market works, it creates greater ability to put downward pressure because the product is cheaper. If it is uncompetitive it won't clear. This creates a lower threshold for it to be competitive at and clear.

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MS GRANT: That will then translate to the customer.

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MR DE KEIZER: Which then flows all the way down to consumer.

MR CHIVERS: The more volume at a lower price into the market will - so long as the market is acting in the way it needs, it should, which is lowest price (indistinct)

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MR DE KEIZER: But it also speaks to the aggregate value and impact that multiple wind farms will have. So, the more we reduce turbines through approvals, the higher the cost of energy has to be to cover the economic requirement to deliver that wind farm. So, in aggregate, yes, this this wind farm has a part of that cost, that increased cost. And then the next one which doesn't get its approvals or doesn't - isn't able to deliver energy at a low cost, adds to the cost again, and so on and so forth, until we do see a full market increase in cost, because we're not delivering efficient, economically viable wind farms.

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MS SYKES: The whole levelised cost of energy for the project is impacted with the removal of.

MR DE KEIZER: Absolutely is. Yes. Now we'll cover biodiversity with Jamie.

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MR CHIVERS: Thanks Scott. We're seeking for the IPC to consider adopting a condition consistent with other wind farms that we've seen approved in New South Wales, that would allow us to rebaseline our biodiversity credit obligations to a final design and therefore improve biodiversity outcomes. As you've seen, we've made a number of changes to the design based on feedback from BCD and surveys. We will progress into a final design where there'll be further optimisation, Geotech and a number of new data points. We're seeking that in the case of the Uungula Wind Farmer condition was included in the approval that allowed them to rebaseline their biodiversity impact within the constraints of the assessment. So not to increase, it had to come down. But then to have the obligation for credit for biodiversity credits at that level of final design and final impact to be assessed, which would include more surveys as well. We're seeking that the same condition that was used in the Uungula wind farm could be used here. We've sought advice from HSF, who said

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that the Biodiversity Conservation Act does allow for this condition and this concept and is consistent with its objectives.

5 MS GRANT: But is it consistent with the objectives of the EP&A Act approvals in terms of being a final and definitive known certain condition, understand the BCA Act might allow it under the EP&A Act. Is it final and certain enough?

10 MR CHIVERS: I would need to get that checked from HSF. So, if we could take that away, I'd like to do that. But to be clear -

MS GRANT: Different question that you might need to ask for -

15 MR CHIVERS: Yes, I think it is a different question, actually. Our intention would not be obviously to increase any species. So, we have our caps by species. And it would only be to come down from that and to have the flexibility to resubmit our BAM calculator to be able to identify that new obligation. We have taken the initiative to go out and secure biodiversity offset sites in the immediate vicinity of the project. We have agreements with landowners, we have undertaken surveys over multiple seasons, and we have applications well formed. So, we are progressing that stream to ensure we have the credits available. But we think it is aligned with what we've seen as a typical market clause condition and what we think to be best practice to incentivise developers into the future, to continue to seek avoidance biodiversity.

25 MS GRANT: And is your ecological advice suggesting that there are sufficient sites and ability to provide those offsets and credits in the marketplace or an avenue for you to secure sites moving forward?

MR CHIVERS: I'd hand over to Aref.

30 MR TALEB: I'll take this one, yes. So, we've engaged Biosis, and we have an offset assessment that identifies in those sites Jamie mentioned how many credits we're going to generate, and that's through a length of detailed surveys then going and doing BAM plots. And we've got a high degree of confidence in what we can generate in the sites we have secured agreements with. We then know what credits we're in deficit of and we're aware of the thing that called the credit Supply Task Force now used to be the Biodiversity Conservation Trust, but they have these credits available to purchase at a certain price. Ones that we can't secure (crosstalk), we can secure them through there or through the private credit market as well. So, we get reached out to by different brokers constantly that have credits that we need.

40 It's another way to set and retire credits.

MR CHIVERS: And just at a broad level, a significant majority of the credits we need are available through the sites, and we're talking about a fairly small gap in deficit terms I don't have the numbers off the top of my head, but if that's interesting,

45 we can provide them.

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MS MEEK: Just reiterating as well that we would be providing certainty in the form of a cap on impacts. And what this would enable us to do is actually deliver a reduced footprint. I obviously take the objectives on notice and come back and address that in our written submissions. But presumably, you know, a ceiling in terms of the maximum impact plus an incentive to further reduce it, I imagine would be consistent with the overarching objectives.

MR MARSHALL: Just a minute. Forgive me for not being fully familiar with how offsets work, but, say to the terms of the Box Gum woodland issue, which there's an offset. What does that practically mean on the ground in terms of - some bit of woodland is going to be cleared as part of the project. And in response, in order to offset that, the project will do what?

MR TALEB: So, in New South Wales, it's essentially to agree to set up a biodiversity stewardship area, which you need an agreement with a landowner to do, which we have. Then there's a set of management actions that associated with that stewardship area, which you pay the cost of those up front for perpetuity. And they are things like fencing, reducing fuel loading, resurveying and re-baselining. And within these applications, there is ambition set out in terms of increasing what they call the vegetation integrity score of that area as well. So, you're agreeing to protect that piece of nature for perpetuity, as well as improving its condition over time. And the unique part about our offset areas is they actually support creating wildlife corridors. So, there's national parks. And where previously was private land for grazing, we've secured those areas in our agreements to be biodiversity stewardship areas. So not at the same level of national parks, but it is fenced off and protected for perpetuity. So, you don't have to re-plant to cover. It's more how the scheme works is you protect and then you can generate credits to cover your offset.

MR MARSHALL: So that stewardship area is not currently protected? Is the point.

MR TALEB: It will be once we register the site.

MR CHIVERS: That's right. It goes from being able to be used for grazing and agriculture to being protected in perpetuity, reserved conservation. And it's not one for one. It is a greater volume of hectares required to generate offset.

MS GRANT: So, is there a map of where those sites are?

MR CHIVERS: Sure. There's one somewhere in the documentation that we've provided over the years. But I can double check.

MR MARSHALL: And how does it work for the birds and the bats?

MR TALEB: So, the sites based on that vegetation and habitat, you generate ecosystem credits. And then based on the survey data, you get species credits as well to offset species obligations.

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MR MARSHALL: So, are you going to be protecting more bird and bat habitat?

5 MR TALEB: Yes. Essentially with habitat in those sites we're getting credits in return for protecting that habitat. If they are found to be of the standard, that needs to be the credit supply task force.

10 MS SYKES: Is there a - you know, similar to the actual productivity of the turbines, like the bird and bat strike, for instance, a heat map around - which includes the impact of those turbines as an example.

15 MR CHIVERS: Yes. We - so, there is a table in the Biodiversity Development Assessment report, which lists the collision risk by turbine and some other parameters to how that has been determined. And basically, it's low, moderate, high, no longer any high collision risk turbines. We reduced the number of moderates quite significantly and introduced what we've called a smart curtailment strategy, where we monitored bat activity over multiple seasons and correlated that activity to environmental conditions, which we've made a commitment to shut off turbines in those conditions where we see higher activity.

20 MS SYKES: Yes. And I was actually keen to explore that smart curtailment strategy. It's a term that - you know, getting our understanding around. How does that actually work? Does it work in real time or how does it sort of - is it more - like how does it actually work in terms of strategy.

25 MR CHIVERS: I might be going outside of my lane here. This is how the OEM, the manufacturer of the turbines operates.

30 MS SYKES: Right. Okay.

MR CHIVERS: But we did do some research on equipment that is available that bolts into the (indistinct) of the turbine, because we needed to demonstrate to BCD this was a real thing -

35 MS SYKES: Yes.

40 MR CHIVERS: That is actually implementable. There is a system that is commercially available for use. My understanding is it will monitor the wind speed as a key driver, as is the temperature. Those are two. So, generally the more windier it is, the less bats are active and the higher the temperature there are summer species, the more active they are. So, we've agreed to thresholds for temperature and wind speed which we would not operate the turbines.

45 MR MARSHALL: Is that turbine by turbines?

MR CHIVERS: It is. It is only for the moderate collision risk impact turbines.

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MR MARSHALL: Are there any of those, for example the -.

MR CHIVERS: 11 turbines?

5 MR MARSHALL: Although 15 that you're seeking -

MR CHIVERS: Yes, there is. I'd need to check the numbers. I think it's somewhere  
in the mid teens in terms of total moderate risk turbines. And I'm going to guess - I'll  
10 just look at that map. So, 28 we're asking for back, that's a moderate collision  
turbine. 28.

MS SYKES: Yes.

MR CHIVERS: Which is down here. Pretty sure that 1 or 2 of these up here are as  
15 well. I can't recall down here.

MS SYKES: Yes. But mostly in that area. In that south -

MR CHIVERS: Yes, most of them are in - are along (crosstalk) -  
20

MS SYKES: Along here, okay.

MR MARSHALL: Is this kind of strategy used elsewhere in Australia?

25 MR CHIVERS: Yes, it has been. In Victoria.

MR MARSHALL: Is there sort of a review of performance and effectiveness?

MR CHIVERS: I'm not sure.  
30

MS MEEK: They're often not publicly available, we can check.

MR CHIVERS: One of the commitments that ENGIE have made is to ensure that the  
data from this is publicly available for assessment by, I think it's universities and  
35 authorities.

MR CHIVERS: Now we move into long awaited.

MS SYKES: Just looking at the time. We've come up to an hour. But if - you can  
40 continue on if you're happy - Another ten minutes or so - ten or fifteen minutes.

MR DE KEIZER: So, David - So next slide, yes.

MR MOIR: Yes. So visual context. So, Nundle itself. So, one of the key factors of  
45 assessing visual impact is really the number of viewers. And as far as we're currently  
working, we've been working in the space for about 15 years and currently working  
on about 40 projects across the state. And I would say out of all of them, this is

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probably one of the least constrained as regards to visual impact, mainly down to the numbers of viewers and population. This site itself is actually situated - the main population areas is at Nundle village, and it's in excess of eight kilometres from Nundle itself. And then we've also got some lifestyle lots associated with Hanging  
5 Rock which are really limited the views to the project, mainly by topography and vegetation. That topography vegetation is really a critical thing in regards to managing the views within this, because it's very undulating. There's a lot of vegetation not only in the ridgelines but also along the road corridors, so views  
10 towards the project are actually really quite contained. From that perspective, just quickly, there's a statement in the assessment around loss of turbines from this not having an impact on the state reaching its targets. Looking at the other projects we're working on, I think if the same parameters are applied, I think would have a similar impact. I think mainly because of those number of viewers.

15 A lot of the other projects we're assessing are far more constrained than this one from the perspective of number of viewers, but also landform, topography and land use. We've been working on this project for five years, and there's been considerable toing and froing between us and Someva and ENGIE, particularly as the objections have come in and talked about ways of mitigation, mitigating impacts. We've - this is  
20 based on the 2016 our assessment bulletin. The bulletin itself provides a few tools in assessment but provides a little bit of - limited guidance on the actual methodology for assessment. So, the methodology we've applied is a best practice methodology, that it's sort of an international best practice methodology that we've gone through a number of court cases and so forth, both in New South Wales, VCAT, TASCAT,  
25 using the same methodology. And it's been generally accepted (indistinct) approach. This just as a point of interest to this actual - the bulletin has now been abandoned, the 2016 bulletin. And there's a new guideline which actually completely abandons all of the methodologies in the 2016 bulletin. And there's a new guideline which has actually been developed in consultation with industry, which the 2016 bulletin  
30 wasn't. The existing land use around there is primarily forestry and grazing. So, you've got a constantly changing landscape there as well. You've got the seasonal changes of the agriculture, but then you've also got the sort of wholesale changes that get particularly to the northeast around there of the forestry, where there's significant impacts to people.

35 Next slide please. This is the landscape character unit. So, they're quite distinct character units that are there - that you can see the proposed turbines there in the blue. Most of the land to the northwest through centrally through the site or through the area is cleared for agriculture. And then you've got the sort of hook of the ranges  
40 which form that sort of bowl and whether the project is actually situated on those ranges. There's forested ranges there, but also cleared ranges as well. From that perspective, though, it is a highly modified landscape and that's in sort of constant transition as well.

45 I'll go to the next slide. So, it's really the five key locations where the Department have raised concerns. Now, the Department's concerns are based on the assessment by O'Hanlon. Now, I guess as far as - I'm going to point to a couple of the

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conclusions from O'Hanlon here, which I think overstate the impact I think I'd like to draw attention to -about the level of assessment. I think O'Hanlon agrees with our methodology and approach. And then draws conclusions, which I think are different to ours. And I would consider to be subjective and really overstating the impact. And  
5 I'll demonstrate that. I think there's the impacts that are there without mitigation. It's been quite extensive work, to looking at ways of where these impacts are determined to occur, of how they might be addressed through mitigation as well. Really it was about looking at how achievable that is. And hopefully we can demonstrate here obviously putting in more detailed submission. Just a couple of examples where we  
10 feel that perhaps what we've demonstrated hasn't been viewed the same way by the Department. I'll be ignoring really DAD 01 just because there's been so much discussion around it.

There is a slide of that further down, but we'll just go through now quickly. NAD 5.  
15 We can go to the next slide here. So sorry, NAD 67. NAD 67 this was one of the sites - all the other sites we had access to, NAD 67 we didn't have access to. Now the position of the Department is to take a conservative and worst case if you don't have access. And from this perspective there were two turbines -

20 MS GRANT: Is this the same landowner as DAD 01.

MR MOIR: DAD 01.

25 MS SYKES: It's the unoccupied?

MR MOIR: Yes. This was determined to - it's obviously there's topography there. This is a wireframe purely working on the topography. And what this demonstrates is the views without any intervening elements of buildings or vegetation. This is modelled from there. There were 261, 262 recommended for removal in this  
30 location. They - the assessment from O'Hanlon, stated that these would dominate the primary northward views of the dwelling. Our assessment identified when we don't have access, we would usually rely on aerial photography and the position of that in relation and the landform and make a conclusion if we don't have access based on that. O'Hanlon's really purely relied on this wireframe only it's a desktop assessment  
35 to draw his conclusion. Recently since submitting this, we've also had the benefit of some lidar data, which we didn't have previously. Um, if we can jump to the next slide on this and that's lidar data actually showing the view from that property. So, all of that green is the vegetation, the trees that occur there. We had assumed that that would intervene with views towards the turbines from NAD 67. And you can see that  
40 yellow section there. That's the turbines recommended for removal in that location. This is really an example of where I think the method of assessment that has been applied by O'Hanlon. And also, I think the subjectivity of the opinion I think overstates the impact significantly. And I don't think his assessment clearly demonstrates the conclusions and how those conclusions are drawn. And I think also  
45 to the language around dominating the northeast view. I don't think it could be said, particularly the vegetation that's in the foreground and the distance to the turbines,

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that you can claim that those turbines will dominate the views to the north. So, if we can go now to NAD 05 -

5 MR MARSHALL: Can I just ask how robust the lidar data might be for the purposes of the conclusions that were drawn.

10 MR MOIR: That would be pretty accurate. Obviously, we can get more accurate lidar data. But as far as the - and you can see - if you look at the area, you can get a pretty good sense of the density of that vegetation and -.

MR MARSHALL: What's the sort of scale at which it can - what's the sort of minimum scale it's registering vegetation at?

15 MR MOIR: So, as far as the accuracy? I would have to check that, but generally for.

MR MARSHALL: Centimetres, metres, you know?

20 MR MOIR: Probably centimetres. You probably - the range of this, it might be 50cm depending on it. But you can't get more accurate ones that are down to the 2 or 3cm depending how high they're flying. But for something like this, when I see the level of detail in there, you probably - it'd be within half a metre of accuracy,

MR MARSHALL: Is the mottled colour significant of anything or it's just -

25 MR MOIR: Generally, at the same site. So, they actually take a - so, they take the point cloud which is the laser point. But they also take photography at the same time which picks up on the colours. So, it merges those colours.

30 MR MARSHALL: It's kind of representation of the vegetation.

MR MOIR: It picks up vegetation - what's vegetation, what's built form, what are those -

35 MR MARSHALL: What are density of vegetation?

40 MR MOIR: Again, the density of vegetation because it's an aerial laser, it'll pick up the canopy. That's the main thing. And then there'll be some penetration. So, the dots that you're actually getting through there is actually where it's, it is penetrating. The darker probably reflects more the density of that vegetation. So, where it's harder to protect - harder to penetrate. But I would - from a canopy level side of things as regards to particularly where you're getting that type of canopy where it's denser, that would be pretty accurate. And then you would have that - you can see the more fragmented areas to the top where you'd probably have a branch with sort of leaves coming out. And that's obviously more in the closer areas we've got. If you were to  
45 push further into that model, you probably find similar forms, yes.

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MR MEAD: Duncan, I just actually looked it up while you asked that question. So, the source of this data is from ELVIS, which is a government available database.

MR MARSHALL: ELVIS did you say?

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MR MEAD: ELVIS, yes. That's elevation – I'll get you the reference.

MR MARSHALL: I'm sure it's reliable.

10 MR CHIVERS: Do it in the voice.

MR MEAD: The data statement says that the spatial accuracy from a vertical perspective is plus or minus point nine of a metre. So, within one metre at a 95% confidence interval. And also, you asked about density. The average point density in this area is four points per square metre. So, in other words one of those point four of those points within a square metre.

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MR MARSHALL: So, you said vertical. What about horizontal.

20 MR MEAD: Yes, horizontal is 1.25m plus or minus.

MS SYKES: At a 95% confidence.

MR MARSHALL: Yes.

25

MR MOIR: Look, when we've matched these to photography, which we've also done, they've been very, very close picking detail up.

MR MARSHALL: This particular one? (Crosstalk).

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MR MOIR: Not this particular site but other examples. Because it's a relatively new thing to be doing this and having access to it. But certainly very useful in situations, I guess the point being with this one in particular is the position of the Department is taking this ultra conservative view on sites you don't have access to which actually favours then, if you're objecting to it, to not allow access and would encourage people in the future to not give access, because that's the position. Not everywhere to is covered by Lidar data.

35

So, next slide is NAD 05. So again, this is a situation where we're 1.8 is the closest turbine. It's our opinion that it is just with the vegetation in the foreground there that it is possible to provide some screening, I guess, to this. And that would be achievable and would start to take effect within 2 to 5 years. This also, too, is not the primary view of the residents. It's actually the driveway view. So, you there - one you can see on the aerial photography down to the bottom right-hand corner. That's the view that's taken where the turbines are. And then there's a view to the north, which is a primary view of the residence, which is over the Nundle Creek Valley. So, under the new guidelines, that would significantly downgrade the sensitivity of that

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viewpoint, where the sensitivity of the primary viewpoint is really the focus and not the utility areas of the house where they may be able to be viewed from. So, the recommendation here is to remove those turbines. I think that the impact here, considering that there is - it is possible to screen them. And also, too, that it's not the primary view that this I think is overstating the issue. I think too that the sector is a view. It's only a single sector. So in regards to the broader 360 degree views available from this residence, that it's only available in one sector. Also, it states in the assessment about any further vegetation would enclose the dwelling. It would obviously screen views to that ridgeline, but it wouldn't screen their views to the Nundle Creek Valley. There's a photo over the residents in our assessment showing that view. And if you actually can see there the extent of vegetation that's around that residence already, which is fairly typical, you'll see, actually in most wind farm areas, that there's often a lot of vegetation around the house because the areas are windy and it's a pretty much part of the vernacular to have that sort of wind protection planting around the house. We feel that in this instance that the impacts are overstated and it's unnecessary to actually remove those turbines for the - I think the impact is not as significant as stated.

MS SYKES: (Indistinct) calling out the impact to the primary view or lack thereof.

MR MOIR: There's no there's no turbines in the primary view.

MS SYKES: Yes.

MR MOIR: Yes, to the north, there's no turbines in that view. And I think in dominating too, I think this comes to the use of that term as well, where it's repeatedly used as dominating, where I think it overstates the influence. I mean, they are a new element in the view. So, there's that change. And I think that's the big challenge with wind really is it's a new element, it's an unfamiliar element. And so, I think that's something that, you know, things like transmission and that we're very familiar with and even though there are some issues around that, I think wind in particular, there's been a lot of focus on, on visual and the impact and that change. But I think a lot of these landscapes are constantly changing. They're highly modified already. And this is one new element within that, that I think is being overstated at the moment through the assessment process.

If you go to the next one, NAD 33, so again, we've got turbines visible within two sectors. I think this assessment is undertaken without actually considering the vegetation as well in the impact. So, we actually have been to site. This is another instance as well where the view and we don't have the aerial on there, but the view is actually from the side of the house. It's not the primary view of the house. The primary view of the house is actually to the north and northeast. So, and the view - the turbines are in the east - also very distant as well from this location. So, we're outside actually exceeding the blue line in the bulletin as their guide of where the most concerns are in regards to visual impact. We're actually outside that. The assessment states that the turbines dominate the landscape and that deleting the turbines - there's benefit to this by the deletion of the turbines. My opinion on this is

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that there really isn't any significant impact on this property. It's not going to significantly change the character of the view, and it's not going to dominate. It'll be an element present in that view, but it's not going to fundamentally change the character of that view.

5

And then if we can go to dwelling at 72. So again, we've got a situation with the turbines visible in one 60 degree sector. You can see from the pine planting in the foreground, it's obviously a very mature pine planting there. But however, it's our opinion that impact can be mitigated within sort of 7 to 10 years. The nearest  
10 turbines, 3 or 4km's away, which is in excess of the black line, which is considered to be the most area of concern. And also, to I guess the point with this one in particular is that the removal of three turbines from there, once the element's in the view, it's really not going to change things materially to have three gone from that view. They will still be a character element within that view. But I think whether there's that  
15 number - depending to - remember, we've got a static view from the perspective of this photo montage. But moving around, the presence of them being there, they will be present. And so, I think the removal of them to - I think is unnecessary. I think if that is acceptable to have those other turbines within the view from this location, then I don't see why removing them actually makes any change to that level of view.

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MR MARSHALL: Is that the primary view from this residence?

MR MOIR: No, it's the entrance to the (indistinct). It is from there? Yes. So, it's actually situated up over that valley. So, it is the primary view. It's the house is  
25 actually orientated a bit away from that. But it is a view from there. It's probably the clear view from there to that ridgeline.

MR MARSHALL: So, screening would be closer to the house?

MR MOIR: Yes. So, the screening would be closer to the house and running down  
30 that fence line where you've got the existing pine. Yes.

MS SYKES: Some know just to be conscious of time. We've been going for an hour  
and 20.

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MR MOIR: One slide -

MS SYKES: One slide would be great. And then perhaps if there were any  
40 remaining questions. Otherwise, we could present them for (indistinct)

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MR DE KEIZER: I'll take over again here. I'll just note the metrics are up on the screen, but we'll provide a bit of a closing statement and.

MS SYKES: Yes.

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MR DE KEIZER: Thanks for your time today. It's always nice to talk about our projects. And we appreciate there are many points of view to consider in this process.

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And a lot of data to crunch through. We hope that the context and arguments that we've presented for reinstatement of the 15 turbines has resonated with you today. I guess, first and foremost, Hills of Gold is a good wind project. It's well sited both in terms of biodiversity and visual impact outcomes. It has strong investable wind resource. Whereas Justice Preston says in Taralga decision, it's where the wind is. It will deliver considerable positive outcomes to the surrounding communities. And it also capitalises on existing infrastructure, not requiring any more external investment. Positively, we mostly agree with DPHI's assessment and can accept the recommendations. However, the points we have concerns with would have significant impacts on the wind farm. We see opportunity for the IPC to rebalance the assessment provided by DPHI and determine in favour of community outcomes, in favour of the energy transition, in favour of reducing the cost of energy to the consumer. The IPC can do this by reinstating 15 turbines. This is not only a need for our project, but a positive determination will set an important tone for future approvals and demonstrate an understanding of the urgency surrounding the energy transition and the critical role that renewable energy plays in that transition. So, we'll open the floor to any last questions, and we just appreciate your time.

MS SYKES: And thank you very much. Did you have any more questions, Juliet?

MS GRANT: Most of my questions have been answered through course of discussion. I guess the only thing we didn't touch on was any implications or impacts from the transmission lines. We've talked about the turbines themselves, but the application includes also the transmission lines. Is there anything in 25 words or less you want to add about that element of the project?

MR DE KEIZER: I don't trust myself with that 25 words or less. But we went through a process of designing the overhead transmission line along that route. And looking at sag and sag of lines and location of towers to determine whether there was areas of biodiversity we didn't need to impact. We started with a corridor of full impact. As we progressed through, we were able to refine what we were proposing with towers or poles where we could not impact, to reduce the levels as part of the application. We have a fairly narrow corridor which we can move within to also try and reduce impact. So, we've gone to quite a lot of effort in both sort of engineering design and surveying those areas to be confident in what the impact could be and avoiding as much as possible.

MR MOIR: I'll probably just add one note, which is that the visual impact of it is extremely low, which I think is evidenced by no issues have been really raised that we've had to respond to. I mean, some, but not it's not been a focus of the assessment.

MR DE KEIZER: We had six routes, and those routes went in all kinds of different directions. And this route is clearly the lowest social impact route. Avoiding sensitive receivers and dwellings.

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MS SYKES: So, if you didn't have any anything more. I just wanted to thank you very much for preparing such a detailed presentation and the information it's incredibly helpful as we sort of work through and wade through all of the information. Thanks very much for your time today, and we look forward to reconnecting in a few weeks.

MR DE KEIZER: Excellent. Thank you.

**<THE MEETING CONCLUDED.**

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