

New South Wales Government Independent Planning Commission

# TRANSCRIPT OF PROCEEDINGS

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

#### **DEPARTMENT MEETING**

PANEL

CLARE SYKES (CHAIR) JULIET GRANT DUNCAN MARSHALL AM

OFFICE OF THE IPC GEOFF KWOK

DEPARTMENT OF PLANNING, HOUSING AND INFRASTRUCTURE	CLAY PRESHAW
	NICOLE BREWER
	ANTHONY KO
	TATSIANA BANDARUK

LOCATION:	VIA VIDEO CONFERENCE
DATE:	09:30 AM – 10:30 AM

09:30 AM – 10:30 AM MONDAY, 15<sup>th</sup> JANUARY 2024

#### **<THE MEETING COMMENCED**

MS SYKES: Well, good morning and welcome. Before we begin, I would like to acknowledge that I'm speaking to you from Gadigal Land, and I acknowledge the
traditional owners of all the country from which we virtually meet today 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

- 10 megawatt wind farm approximately 60km south east of Tamworth, near Nundle, Hanging Rock and Crawney, in the local government areas of Tamworth, Upper Hunter and Liverpool Plains. The proposed project involves a 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
- 15 Wallabadah, and other associated ancillary infrastructure. My name is Clare Sykes. I am the chair of this commission panel and I am joined by my fellow commissioners, Commissioners Juliet Grant and Duncan Marshall. We are also joined by Geoff Kwok from the office of the Independent Planning Commission.
- 20 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. 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 is
- 25 important for the commissioners to ask questions of attendees and to clarify if issues, whenever it is considered appropriate. If you are asked to question and are not in a position to answer, please feel free to take up the question on notice and provide any additional information in writing, which we will then put up on our website. I request that all members here today introduce themselves before speaking for the first time,
- 30 and for all members to ensure that they do not speak over the top of each other to ensure accuracy of the transcript. So we will now begin. may I first ask each member joining from the Department to please introduce yourself now? Thank you.
- MR PRESHAW: Yeah. Hi. I'm Clay Preshaw, the Executive Director of energy resources and industry assessments. But today, Nicole Brewer will be leading the discussion.

MS BREWER: Nicole Brewer, Director, Energy Assessments.

40 MR KO: Anthony Ko, Team Leader in Energy Assessments.

MS BANDARUK: Good morning, I'm Tatsiana Bandaruk, team leader in Energy Assessments.

45 MS SYKES: Thanks. Thanks very much, everyone, and thanks, Nicole. so you would have received the agenda for the meeting, and, I guess we invite you to

commence on the first part of the agenda where we discuss the key issues with an overview of the assessment and the key issues raised.

MS BREWER: Thank you. I'd also like to acknowledge the traditional custodians of the land in which we're joining today's meeting and pay my respects to their elders, past, present and emerging, and extend that respect to any Aboriginal and Torres Strait Islander people here today. I'd first like to make some general comments on the assessment of this project. Assessing this project has been complex and challenging. The project, as it was proposed in the EIS, had substantial issues and the Department

- 10 felt that if left unresolved, it would have led to a recommendation for refusal. The Department raised significant concerns about the key issues for the project at the time the SEARs were issued, particularly regarding primary transport route, which required major civil works to build a haul road through Devil's Elbow on Barry Road. The proximity, a number of turbines close to Ben Halls Gap Nature Reserve
- 15 and visual impacts to non-associated neighbours. The Applicant took significant time to address these concerns, amending the project design over the time in the planning process, and the project was publicly exhibited twice, with the EIS exhibited in December 2020 to January 2021 and the Second Amendment report in November to December 2022. I'll firstly cover the strategic and regional context of the project, and
- 20 then describe the Department's engagement with the community feedback received before I move on to the key issues and other items noted in the Commission's agenda. I'd also like to use this opportunity to provide details on the key assessment issues and several other matters considered by the Department and our evaluation of the project, and in particular, how substantial issues presented in the EIS can be
- resolved, the Department's recommended conditions and the key reasons for recommendation to the Commission to approve the project.

In response to concerns raised by the Department, Tamworth Regional Council, Crown Lands and the community, the Applicants amended the project design and

- 30 removed six turbines over the course of assessment, reducing the total number of turbines from 70 to 64. The Applicants also removed the traffic route option for blade transport through Devil's Elbow on Barry Road. With the amendments proposed by the Applicant, the project would generate 384MW and would have 64 turbines. The Department, however, has recommended approval of 47 turbines,
- 35 which would have a capacity of 282MW, which I'll discuss later. Before I get into the assessment issues, it's important to provide some strategic context about wind farm development in New South Wales and the project's location. This is a second wind farm project referred to the Commission since 2019, when Crookwell 3 Wind Farm was refused. The last wind farm approved by the commission was the Rye Park
- 40 Wind Farm in May 2017, and the two most recent wind farms approved by the Department are Eungella Wind Farm in May 2021, and Yanco Delta Wind Farm in December 2023. The energy context, policy context in Australia and New South Wales has changed significantly in recent years.
- 45 MS BREWER: The Commonwealth has set a pathway to net zero emissions by 2050, and affirmed Australia's commitment to meeting its revised 2030 target, being 43% below 2005 levels. The Australian Energy Market Operators 2022 Integrated

System Plan, or ISP, states that without coal, a nine fold increase in large scale renewable energy generation is needed, and this has been further reinforced in the recent 2024 draft ISP. Several New South Wales policies and plans aim to achieve net zero emissions in New South Wales by 2050, and reduce emissions by 70%

- 5 below 2005 levels by 2035. The New South Wales Climate Change Net Zero Future Bill 2023 commits New South Wales to cutting greenhouse gas emissions by at least 50% by 2030, and reaching net zero by 2050. These policies also identify renewable energy zones, or raises, across New South Wales, which are aimed at encouraging investment in electricity infrastructure and unlocking additional generation capacity
- 10 in order to secure and to ensure secure and reliable energy in New South Wales. Although this project is not located within a REZ, by being in a region close to these REZs, the infrastructure in the region, such as road upgrades to support the development of renewable energy generation such as wind farms, would be coordinated by the New South Wales Government through Energy Co. In addition,
- 15 the Department's implementing a new energy policy framework to help achieve the transition to renewable energy, reduce emissions, and secure an affordable supply of electricity for the people of New South Wales.

MS BREWER: Given that all the coal fired power plants in New South Wales are scheduled for closure in the next 20 years, the project would assist in providing large scale renewable energy generation to meet increased electricity demand. The Department considers that the project is consistent with the relevant national, state and local policy documents which identify the need to diversify the energy generation mix and reduce the carbon emissions intensity of the grid, while

- 25 providing energy security and reliability. The sites, located approximately eight kilometres south east of Nundle in the New England region of New South Wales, 15km south west of the New England REZ. The site has access to the electricity network via a new 330 kilovolt transmission line to connect to Transgrid's existing network at Wallabadah. The site is also suitable for a wind farm, as the site has high
- 30 wind resource and is located on an elevated ridgeline that has an orientation with good exposure to prevailing wind directions. Ridgelines can take advantage of the acceleration of wind due to the sudden change in topography. I'd like to briefly mention the Department's engagement on this project. The Department exhibited the EIS from the 2nd of December 2020 until the 29th of January 2021, and received 592
- 35 public submissions, consisting of 382 objections, 201 in support and three comments.

MS BREWER: The Department also exhibited the Second Amendment report from the 16th of November until the 13th of December 2022, receiving 425 public submissions consisting of 280 objections, 144 support and one comment. In regard to

- 40 the location of the submissions, 58% of submissions from people within ten kilometres of the project site objected to the project, and 42% provided submissions in support of the project. Just to note that, we acknowledge that there's an inconsistency in the Department's assessment report on page 82, which is the other issues table, the section on social and economic, which provided that data the other
- 45 way round. But I note that table five in the assessment report provides a more detailed breakdown of the submissions and correctly reflects that breakdown. Advice was also received from 19 government agencies along with the City of Newcastle,

Muswellbrook, Upper Hunter and Tamworth regional Councils. None of the agencies or utility providers objected to the project, but two Councils, Tamworth Regional Council and Muswellbrook Shire Council, did object. The Department visited the site five times between 2018 and 2023, including with its visual expert in 2021, and

5 met with landholders near the site. The most common matters raised in public objections were biodiversity, amenity impacts including visual and noise, socioeconomic factors, site suitability due to concerns on the high erodibility and landslip potential of the site that flows into the water catchments, and amenity impacts and transport.

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MS BREWER: Submissions in support raise the benefits to the local economy through the creation of local jobs, investment in the area, road upgrades and improvements to road safety conditions and the benefits of renewable energy. I'm now going to talk about what we consider to be the four key issues for assessment

- 15 being energy security, visual amenity, traffic and transport, and biodiversity. Regarding energy security, the project, as recommended by the Department, would have a capacity of 282MW, which would generate enough energy to power about 150,000 homes. This is consistent with a number of national and state policies, including the New South Wales Climate Change Bill of achieving net zero emissions
- 20 by 2050. The project will play an important role in increasing renewable energy generation and capacity, and contributing to the transition to a cleaner energy system as the coal fired generators retire. There are a number of planned closures of coal fired power stations in the state in the next decade, and this project is an opportunity to contribute to the replacement of the loss of energy generation across the state and
- 25 utilise existing electricity network infrastructure. The Department visited the site and several non-associated residences surrounding the project to assess visual impacts. We also engaged independent advice from O'Hanlon Design landscape architects to review the Applicant's visual assessment, visit non-associated residences and provide independent advice. The Department also assessed the project against the
- 30 performance objectives of the guideline. The Visual Assessment Bulletin, which considers visual magnitude, multiple wind turbine effects, landscape scenic integrity, key feature disruption, shadow flicker, blade glint, and aviation hazard lighting.
- MS BREWER: It's important to note that the Department raised concerns about the potential visual impacts of the project from before the SEARs were requested and throughout the assessment process, including following exhibition of the EIS in 2021 and then again in February 2022 and March 2022. In request for information letters, the Applicant eventually responded to concerns raised by the Department during its assessment of the project to address the issues by recently securing neighbour
- 40 agreements with eight additional landowners and making minor reductions to the project layout with the removal of six of the 70 turbines originally proposed. In the absence of securing agreements with several key non-associated receivers, which were flagged with the Applicant from an early stage, we recommend that 15 of the 17 turbines be removed to address visual impacts. Looking at the assessment for
- 45 public viewpoints, ENGIE's assessment summarised that while the project is likely to be a visible element in the landscape, the scenic integrity of the existing landscape character is likely to remain intact. Overall views of the project would be limited by

distance, intervening topography and existing mature vegetation. In summary, the Department considered that the project as recommended with fewer turbines, while visually apparent for public viewpoints, would not dominate the existing visual catchment. Now moving to the assessment of visual impact from private receivers

- 5 based on the detailed assessment and consideration of the visual bulletin and the independent advice, the Department considered that the performance objectives of the bulletin would not be met at seven receivers DAD 1, NAD 5, NAD 67, NAD 33, NAD 69, NAD 72 and NAD 98.
- 10 MS BREWER: As a result, the Department recommended 17 turbines be deleted. 11 of these were recommended for deletion for multiple reasons, ten were due to visual and noise impacts, one for visual and biodiversity impacts, five for only visual impacts, and two for only biodiversity impacts. This figure shows the overall layout of the project, and the blue turbines are those that are recommended for approval,
- 15 and orange are those that the Department has recommended for deletion. While the deletions were made for specific impacts on multiple receivers or for biodiversity, they also benefit the overall landscape of the project. To give you a snapshot of the visual impacts, included in the slides are photo montages from three locations. At the first location, DAD one at the northern end of the project, the figure on the left shows
- 20 the view to the south, and the figure on the right shows the view to the north. And that's because that receiver would be surrounded by turbines. At this location, 18 turbines are within 3.1km, with ten turbines within two kilometres, and the closest is 330m. So the Department recommended deletion of 11 turbines due to their proximity being highly visible and that they would dominate the landscape for this
- 25 receiver, and all but one of these turbines would also have a noise impact at this receiver that could not be mitigated, and one turbine was also within the distance of ice being thrown from the blades.
- MS BREWER: Deletion of the 11 turbines would also reduce the impact of two other receivers where there were visual concerns, NAD 33 and NAD 5. In the middle photo is NAD 5. Also at the northern end of the project, the Department considered that five turbines should be deleted. All of those were also recommended for DAD 1. In the last photo on the slide NAD 72 at the south western end of the project, the Department considered that three turbines should be deleted. All of these benefit
- 35 other nearby receivers where there were visual concerns, in particular NAD 98 and NAD 33. Regarding aviation hazard lighting, the Civil Aviation Safety Authority, known as CASA, advised that the project is considered a hazard to aviation safety and recommended that the wind farm is obstacle lit with low intensity lighting and developed a night lighting plan, proposing to light 28 of the 64 turbines with lower
- 40 intensity aviation hazard lighting. A light source at 200 candela will admit about 1200 lumens above the horizontal plane, which is roughly equivalent to one and a half traditional 60 watt incandescent light globes, for reference.

MS BREWER: The Department's recommended conditions requiring to consult with CASA regarding the installation of aviation hazard lighting and operate hazard lighting in accordance with CASA requirements and in a manner that minimises any adverse visual impacts. In conclusion, the Department acknowledges that developing

a wind farm with the recommended reduction in layout just 47 turbines would still be visually apparent. However, this layout would meet the visual performance objectives described in the Visual Assessment Bulletin as it would not dominate the existing visual catchment. The recommended conditions require you to offer

- 5 landscaping and or vegetation screening to all non-associated residences within five kilometres, and to implement all reasonable and feasible measures to minimise the impacts of the visual appearance of the development. Now to transport. There are slightly different transport routes for different types of traffic for this project. The transport route during construction would be via the Denman Road, Bengalla Road,
- 10 Wybong Road, Cayuga Road, Main Street, Sturt Street, New England Highway, Lindsay's Gap Road and Nundle Road. Heavy vehicles would access the site by either Old Hanging Rock Road, Barry Road and Morrison's Gap Road or Herring Street, Innes Street, Jenkins Street and Crawney Road. Vehicles transporting wind turbine blades would access the site by Crosby Street, Oceanville Street, and a new
- 15 access site access on Crawney Road. This last route for vehicles requiring escort for the wind turbine blades, also known as Over dimensional vehicles, was added in response to significant concerns raised by Tamworth Regional Council.

MS BREWER: The project was amended so that it would not use Barry Road, which removed the need for the construction of a bypass road at the Devil's Elbow. This was a significant change in the proposed project. Regarding construction traffic volumes, light and heavy vehicle movements would peak at up to 78 light vehicles and 63 heavy vehicles per day over the 24 month construction period. A maximum of six heavy vehicles requiring escort per day would be required for the delivery of

- 25 wind turbine components to the site during construction. To support the transport route for construction, a schedule of road upgrades is included in the draft instrument, requiring ENGIE to undertake these upgrades to the satisfaction of the relevant Roads Authority, repair any damage attributable to the development, schedule heavy vehicle movements to avoid peak hour traffic and prepare a
- 30 complimentary comprehensive traffic management plan. The Department engaged with Energy Co regarding proposed road upgrades from the Port of Newcastle and Bengalla Road in Muswellbrook Shire LGA. Some works relate to those required for the Central West REZ, and additional works from Bengalla Road in Muswellbrook North would be required to facilitate transport to the New England REZ. The
- 35 Department considers that the proposed transport should, to the fullest extent possible, adhere to the road network upgrade upgrades proposed to be facilitated by Energy Co. As such, the Department recommended a condition restricting the movement of vehicles to route one.
- 40 MS BREWER: The Department's assessment also concluded that restricting transport route options would reduce the transport impacts and recommended restricting Crawney Road site access to option B to reduce impact on Crown land, and removing the Happy Valley Road route option through Nundle. With road upgrades, regular road maintenance and the implementation of the Traffic
- 45 management plan, the Department considers that the project would not result in unacceptable impacts on the capacity, efficiency or safety of the road network, subject to the implementation of the recommended conditions, and operational traffic

is expected to be minimal. Now to biodiversity in New South Wales. The best wind resources are often available at higher elevations on hills and ridges, which is where this project is located. These areas are often associated with the least historic vegetation clearing, and for that reason, most wind farm projects cannot be

- 5 developed without some vegetation clearing. The project was designed to avoid and minimise impacts on threatened species and communities, and turbines have been located outside of migratory pathways to reduce the collision of birds and bats. Of the 8700 hectare project site and 447 hectare development footprint, about 191 hectares of native vegetation would be cleared, of which approximately 40 hectares
- 10 is derived native grassland. Approximately 22 hectares of the impacted vegetation comprises threatened ecological communities listed under the Biodiversity Conservation Act, including around eight hectares of box-gum woodland, which is made up of 2.75 hectares of woodland and 5.4 hectares of derived native grassland.
- 15 MS BREWER: The Department's assessment concluded that removal of two turbines, 24 and 28, would further avoid impacts by reducing the clearing of threatened ecological communities in moderate to good condition, and provide additional benefit by removing turbines that pose a moderate impact risk of blade strike to avifauna, further reducing the potential for impact. Turbine 42 is also
- 20 recommended for removal due to its very close proximity to the Ben Halls Gap Nature Reserve, being located within 130m of the canopy of the vegetation in the reserve. Flora and fauna impacts, no candidate threatened flora species would be impacted by the project in regard to threatened fauna species. 14 threatened fauna species listed under the Biodiversity Conservation Act and 66 listed under the EPBC
- 25 Act, may be impacted through direct habitat loss from vegetation clearing and indirect impacts. Impacts would be offset via species credit offsets regarding bat strike. The area surrounding the project site is known to have high species diversity and density of microbats, and the Biodiversity Development Assessment Report, or BDA included a strike risk assessment for individual turbines. ENGIE removed three
- 30 of the four turbines identified as having a high collision risk, and relocated the force to reduce the likelihood of strikes. The assessment identified a correlation between bat activity at hub height and certain wind speeds that was at lower wind speeds less than five metres per second, and ENGIE has proposed to implement a smart curtailment strategy, that is, conditions when certain turbines would not operate for
- 35 those turbines deemed to pose a moderate risk of collision impacts to avifauna.

MS BREWER: The Department's recommended conditions, requiring the Applicant to carry out detailed monitoring of the bird and bat strike impacts of the project, and carry out adaptive management if the impacts are higher than predicted or result in

- 40 adverse impacts on any threatened bird or bat species in the locality. The impacts to native vegetation and species would generate approximately 5,800 ecosystem credits and 9400 species credits. The Department's recommended conditions requiring the Applicant to retire the required biodiversity offset credits prior to carrying out any development that would directly or indirectly impact biodiversity values requiring
- 45 offset. So overall, the Department considers that the biodiversity impacts of the project would not be significant subject to the additional removal of turbines 24, 28 and 42, the implementation of the recommended conditions and by offsetting the

residual biodiversity impacts of the project. Now I'll talk about selected other matters that the Department considered during its assessment, and give an overview of the adjustments to the project proposed by the Applicant and recommended by the Department. I'll also touch on the Department's site inspections, including

5 landowners and areas we visited. In regard to subdivision, the Applicant is seeking to subdivide two parcels of land, one for the switching yard and one for the substation and BESS.

MS BREWER: The new lots created by the subdivision would be transferred to Transgrid or another network operator at their request. The Department acknowledges that the subdivision would create new lots that would not meet the minimum lot size for land use zoned RU1 primary production and are therefore prohibited. Under a strict reading of the Liverpool Plains LEP, Section 4.383 of the EPA act does allow the development consent for the project as a whole to be granted,

- 15 despite the subdivision of the application being prohibited by the LEP. The Department considers that the subdivision would be reasonable and would not create additional dwellings. Such subdivisions are usually required for most solar and wind farm projects, as they allow a network operator to have uninterrupted access to a switching yard and or substation for the duration of the project life. In regards to
- 20 constructability of the project, the community did raise concerns with the high erosion and landslip potential of the site and potential impacts on water catchments. This included the Local Interest Group commissioning reviews of the EIS. The Department engaged independent advice on this issue from Pells Sullivan Meynink to review the constructability of the project and the erosion and sediment control
- 25 assumptions made by the Applicant. It also included commentary on the peer reviews commissioned by The Hills of Gold Preservation Inc. Special Interest Group, in terms of its relevancy to the management of soil and water impacts to the development.
- 30 MS BREWER: The Department and the independent advice consider that the Applicants sufficiently demonstrated in its concept design that appropriate mitigation measures and strategies can be developed and implemented during the detailed design stage. It's also noted that it's a strict liability offence to pollute any waters off the side under the POEO Act. Onto noise. Over the 24 month construction period,
- 35 seven non-associated receivers would exceed the noise affected criterion, but would be well below the highly noise affected criterion as specified under the EPA's Interim Construction Noise Guideline for all non-associated receivers during standard construction hours. The Department's recommended conditions restricting works to standard construction hours, with no works permitted on Sundays or New South
- 40 Wales public holidays. The recommended conditions do allow for works that are inaudible at non-associated receivers to occur outside of standard hours. Construction traffic noise would comply with the New South Wales Road noise policy at all receivers, and in regard to operational noise modelling, predicts that five non-associated receivers would not comply with the relevant noise criteria. As such,
- 45 the Applicant is committed to a curtailment regime to operate ten turbines in a noise reduced mode at wind speeds above eight metres per second. The noise levels are expected to comply with the adopted criteria. Four of the five non-associated

receivers with the implementation of that curtailment regime, but cannot be met at one DAD 1, which also relates to the deletion of the nine turbines we discussed earlier.

- 5 MS BREWER: The Hills of Gold Preservation, Inc. Special Interest Group commissioned a peer review of the Applicant's noise impact assessment, focusing on the assessment of operational noise impacts. The Department considers that the information provided by the Applicant regarding the candidate wind turbine model and the noise modelling to be appropriate. Both the Department and the Environment
- 10 Protection Authority consider that the operational noise impacts of the project can comply with the requirements of the Department's noise bulletin, and the project would be subject to strict noise limits under an Environment Protection licence. On heritage. Firstly on Aboriginal heritage. The Applicant identified eight sites comprising three isolated finds, four artefact scatters and one potential
- 15 archaeological deposit or pad. Most of the sites were of low significance except for the pad and two artefact scatters. One of the eight sites would be located outside the proposed amended development corridor, and would not be impacted. Where the impact cannot be avoided, the Applicants committed to surface collection and relocation of items to suitable alternative locations. Salvage. Salvage excavations
- 20 would be conducted at sites of moderate significance where impact is unavoidable. Surface collected and salvage excavations would also be undertaken in consultation with Aboriginal stakeholders. The Departments recommended a condition requiring the Applicant to implement all reasonable and feasible measures to avoid and minimise harm to these sites, and provide a detailed justification where impacts
- 25 cannot be avoided. And on historic heritage. Tamworth Regional Council and the community raised concerns about the project's impacts on the heritage character of the Nundle village, including vibration impacts caused by construction, traffic and proposed impacts on the historic location of the Black Snake Gold mine located on Crown land.
- 30

MS BREWER: The Applicant amended the proposed transport route for heavy vehicles, requiring escort to avoid the impacts to the Black Snake gold mine and the Crown land, which was the route through Devil's Elbow. Tamworth Regional Council expressed concern that the temporary access route would also cause ongoing

- 35 impacts on the heritage curtilage of the Peel Inn. The Applicant's statement of heritage impact concluded that the temporary access road would not have an impact on the heritage street's streetscape of Nundle and a minor temporary impact to aesthetic values of the Peel Inn, but a negligible impact overall. The Department notes that the proposed temporary access road would be at the rear of the Peel Inn
- 40 and not adjacent to its front façade, and the Applicant's committed to remove and rehabilitate the access road through the Peel Inn curtilage at the conclusion of construction. This access road would need to be reinstated and rehabilitated as required during operation and decommissioning. The proposed transport route for heavy vehicles through Nundle passes close to locally listed heritage items Saint
- 45 Peter's Catholic Church and the Nundle Shire offices. Approximately 80 and 20m from the roadway, respectively, the Department considers that impacts to Saint Peter's Catholic Church are unlikely, as the Nundle Shire offices are closer to the

roadway. The Department's recommended conditions regarding road noise and vibration impacts at the building.

MS BREWER: The Department also recommends the Applicant undertake pre and post construction dilapidation surveys of the building to monitor for potential impacts. In regard to decommissioning and rehabilitation, ENGIE estimates the operational life of this project is about 35 years, but there is potential for it to operate for a longer period of time if turbines are upgraded over time, as permitted under the recommended conditions of consent. The recommended conditions require the

- 10 Applicant to rehabilitate the site in accordance with a number of objectives, which include that the site must be safe, stable and non-polluting. Above ground infrastructure access, roads and underground cabling must be removed unless the Planning Secretary agrees otherwise, and land must be rehabilitated and restored to pre-existing use. With the implementation of objective based conditions and
- 15 monitoring requirements, the Department considers that the project would be suitably decommissioned at the end of the project life, and that the site will be appropriately rehabilitated. 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
- 20 commercial arrangements outside of the planning system. In regard to socio economic impacts. The project would provide benefit to the community by providing approximately 200 construction jobs, expenditure on accommodation and businesses in the local economy by workers, and goods and services. In addition, ENGIE would enter into a voluntary planning agreement or VPA, with Council providing
- 25 contributions of up to \$1.3 million, adjusted to CPI to Upper Hunter Shire Council and \$9.5 million to Tamworth Regional Council, prioritising community projects within 20km of the site.

MS BREWER: While Tamworth Regional Council accepted the quantum of the

- 30 VPA offered by ENGIE, it did not accept the financial terms of the timing of payments and administration mechanism. The Department's recommended that if the VPA offered by ENGIE is not accepted by Tamworth Regional Council and therefore unable to be executed, it's reasonable to include a condition that the Applicant make a monetary contribution to Tamworth Regional Council of \$6.3
- 35 million. There would be broader benefits to the state through the injection of \$826 million in capital investment into the New South Wales economy. The Applicants committed to sourcing workers from the local community to reduce accommodation and service pressures, and the Department has recommended a condition requiring the Applicant to develop an accommodation and employment strategy in consultation
- 40 with Council. A number of submissions raise concerns about the potential adverse impacts on property values, and the Department notes that the Land and Environment Court has ruled on several occasions that the assessment of impacts of projects on individual property values is not generally a relevant consideration under the EPA act, unless the project would have significant and widespread economic

45 impacts on the locality, which is not the case in this instance.

On the Department's site inspection. The Department's been to the area on five

different occasions. The first visit occurred before the Department issued SEARs. During the assessment process since the EIS was lodged, the Department visited the site four times and met with residents along Timor Crawney Road, Morrison's Gap Road along head of Peel Road, as well as visited the potential location of DAD 1.

- 5 The Department also looked at the Devil's Elbow on Barry Road and the proposed alternative site access points off Crawney Road. The next slide provides a summary of adjustments to the project made by the Applicant, following the EIS exhibition and consideration of the submissions, the Applicant made changes to the project which it presented into amendment reports. Key changes from the two amendments
- 10 included deletion of six turbines and re-siting 20 turbines, mostly in response to concerns from BCS and National Parks and Wildlife Service on impacts to avifauna. And visual impacts. The amendments also included relocating the site access point for the delivery of turbine blades and heavy vehicles, requiring escort to Crawney road, removing the Devil's Elbow bypass on Barry Road, and removal of the Head of
- 15 Peel Road as an access route for these type of deliveries. There was realignment of the internal access tracks and power lines, and a reduction in native clearing of vegetation by approximately 17 hectares. Given the reconfiguration of site access via Crawney road for the delivery of turbine blades, that presented a significant change to the project. The Department exhibited that Second Amendment report, requested a
- 20 submissions report, and provided these documents on its website, and provided it to government agencies and local Councils for comment.

MS BREWER: The next slide provides a summary of adjustments to the project, including the Applicant's amendments and the Department's recommended changes.

- 25 So the Department recommends deleting an additional 17 turbines, restricting transport route options, including restricting Crawney road site access to option B, removing the Happy Valley Road route option through Nundle. In summary, this has been a long, complex and challenging assessment. The Department's undertaken a comprehensive assessment of the merits of the project. The wind farm development
- 30 is a suitable land use for the site, as it has good wind resources and access to the existing electricity network. Electricity generating works on the side are permissible with consent, and the access to the existing electricity network may allow the wind farm to generate renewable energy earlier than other projects that rely on new transmission infrastructure, and is located adjacent to two races where infrastructure
- 35 in the region would be supported by the New South Wales Government. The project's been designed or amended through the assessment process in response to the Department's concerns, including removing six turbines and removing the haulage road transport option on the Devil's Elbow. In response to concerns from the community, the objection from Tamworth Regional Council and concerns raised by
- 40 BCD, National Parks and Wildlife Service and Crown lands. The project layout as recommended by the Department, we consider suitably addresses noise and amenity impacts to nearby non-associated receivers, areas of higher biodiversity values and transport impacts. Any residual impacts would be relatively minor and can be managed through recommended conditions of consent. With the additional neighbour
- 45 agreements secured by the Applicant and the the Department's recommendation to delete an additional 17 turbines, the Department considers there would be no significant visual impacts on surrounding residences. The project would not

significantly impact threatened species and ecological communities of the locality, and any residual biodiversity impacts can be managed or mitigated by imposing appropriate conditions, such as the implementation of a bird and bat adaptive management plan and retiring the required biodiversity offset credits. Importantly,

- 5 the project would assist in transitioning the energy sector from coal and gas fired power stations to low emission sources and is consistent with New South Wales Government policy. It would generate over 860,000 megawatt hours of clean electricity annually, which is enough to power around 150,000 homes and save over 830,000 tonnes of greenhouse gas emissions per year. The Department considers that
- 10 the project achieves an appropriate balance between maximising the efficiency of the wind resource development, and minimising the potential impacts on surrounding land users and the environment through job creation and capital investment and a planning agreement with Councils. The project would also stimulate economic investment in renewable energy and provide flow on benefits to the local
- 15 community. On balance, the Department considers that the project is in the public interest and is approvable subject to the recommended conditions of consent.

MS SYKES: Okay. Well, thank you very much, Nicole, for that presentation and very detailed information as well, which I'm sure has clarified a lot of points for the

- 20 commission. I think probably at this point it would be good to open up for any questions or clarification from the panel members and myself and I might just start if that's okay with just one question on...With the adjusted, or recommendations from the Department, for the removal of an additional 17 deletion of another 17 turbines, do you have a feel for...Could you clarify for the panel for the commission what that
- 25 means in terms of socio economic benefits? For example, is it still, you know, an estimate of 200, you know, employees required for construction, but it just goes for a shorter duration? Or does that get adjusted? you know, what would be the impacts of that deletion?
- 30 MS BREWER: I think in general there would probably be a similar workforce that would be required for this number of turbines because there are certain, you know, types of trades and really specific areas that are required for that construction of the project. So I would imagine that the construction workforce would be similar. It may perhaps be shorter because there is less time required to construct fewer turbines. So
- 35 I would imagine that the numbers are probably there or thereabouts, but the construction period potentially is a little bit less. But some of the sort of significant time impacts around the internal road construction and that sort of thing, are generally the kind of longer time frames as part of a construction program. So they may remain fairly similar, but they may be reduced slightly because of those fewer
- 40 turbines. But what we see for construction projects is that they sometimes are constructing on a number of fronts. So it could just be that one of those fronts in parallel, you know, might not occur.

MS SYKES: So in general, you'd say the socioeconomic benefits remain unchanged or relative to the original amended application?

MS BREWER: I would think that they would be similar. Yes.

MS SYKES: Okay. You had a question about...

MS GRANT: Yeah, I've got...I've got a few. Well, the energy, the discussions you've
had with Energy Co, and the timing, a lot of the project relies on upgrades being
undertaken by Energy Co. Did Energy Co's discussions with you indicate that the
timing aligns? Just mindful that this project is reliant on road upgrades being
delivered by a, you know, a separate and unrelated third party. So is there an
indication of whether the timing of that and the certainty of those upgrades exists to
be able to support this project?

MS BREWER: So yes, we've had a number of discussions with Energy Co on this matter, and they've also released a number of public statements about having a memorandum of understanding with Transport for New South Wales around

- 15 facilitating road upgrades and facilitating delivery of the REZs. So the Central West Arana Renewable Energy Zone is the first renewable energy zone, is the first one progressing. And those road upgrades, they've talked about those being in place by I think it's 2025. Correct me if I'm wrong, team, and they've also committed to facilitating the renewable energy zone in New England region. So most of the road
- 20 upgrades to get to Muswellbrook would facilitate both renewable energy zones, so would be in that earlier time frame. And the New England Renewable energy zone would be slightly behind that and relates only to some additional road upgrades that are just beyond Muswellbrook or in and around Muswellbrook on the northern side that don't relate to the central Western Renewable Energy zone. I think those road
- 25 upgrades relate to the delivery of those heavy vehicles requiring escort. So they're the ones, that are for the blade delivery. So our feeling is that that could work in an overall scheme of, of a construction program because the, the turbines aren't the first thing to be delivered to site. There's, you know, substantial setup works that need to be done in advance of turbine blades being delivered to site, so that I guess our
- 30 feeling is that the New South Wales government has made a number of commitments on, you know, more broadly on renewable energy, but also on delivery of these renewable energy zones. And those upgrades are part of the New South Wales government facilitating those renewable energy zones so I guess we feel that they are their commitments that have been made publicly and could align with the timing of
- 35 construction of a project like this.

MS GRANT: Thank you. Another question, if I may, the smart curtailment strategy, is that something that has been implemented elsewhere on other projects, or would this be the first time it's being introduced?

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MS BREWER: I'd have to perhaps take that on notice. But in general, I think it's something that a lot of assessments have looked at, and that Applicants have, you know, have been looking at through assessments of projects that are on foot. But, we're aware that it has been used overseas and that's why, you know, the Applicant

45 has proposed to use it. It's part of a, you know, there's significant amounts of, you know, monitoring and technology that obviously goes into the operation of wind turbines. And it's around, you know, making those settings, you know, available to

respond to the conditions and respond to the potential impacts if required. I think it probably is more novel in New South Wales, but it is used overseas. And it was something that the Applicant offered.

- 5 MS SYKES: I just had a question following from that. Actually, it's probably just a point of clarification with when you were presenting on the risk of bird and bat strike, and with that, the risk assessment, three turbines are recommended for or have been removed as part of the design and that an adaptive management strategy would remain in place. Is the smart curtailment strategy the adaptive management strategy?
- 10 Or are there other sort of elements to an adaptive management strategy that, is more, you know, is broader?

MS BREWER: The adaptive management strategy, there's this BBAM, bird and bat adaptive management program, is something that's been required on all of the wind

- 15 farms that have been approved to date. And so it includes a whole lot of monitoring and responding to the operation of the turbines. And you know, what's happening during that operation. So it does include, you know, a whole lot of other, you know, potential mechanisms, but the the smart curtailment sits as part of that BBAM or bird and bat adaptive management plan. Other sorts of things can be, you know, as
- 20 simple as, you know, making sure that there isn't grazing, you know, immediately under turbines and that sort of thing so that, you know, predator species aren't attracted to certain areas. So there's a number of things that go into those. They're quite detailed adaptive management plans. They've been in place, for all of our the wind farms approved in New South Wales. But yes, the smart curtailment would sit as next of thet hind and het adaptive management processes.
- as part of that bird and bat adaptive management program.

MS GRANT: Thanks, Nicole.

- MR MARSHALL: And if I may just follow on, I mean, I guess it would be
   interesting to know about that overseas experience in using a smart curtailment
   strategy. But I guess in particular, whether it's been effective, things might be
   implemented, but whether they're actually achieving the kind of, outcomes that are
   wanted in this case. So effectiveness of that strategy would be interesting to learn
   about.
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MS SYKES: And just for clarification, there were two nominated as high risk that were removed. Were they the only two that were nominated as high risk or are there others that remain?

40 MS BREWER: From memory, there were, I don't think any high risk turbines remain. So that was those two high risk turbines were the ones that were removed.

MR MARSHALL: Actually, if I can have a follow on question, I mean, I think you mentioned turbines in proximity to the Ben Halls Gap area. but I think if I'm right,

45 the conditions talk about turbines not less than 130m from the boundary of that area, which doesn't sound very far away from the canopy of that area. I'm just wondering, what's the strength of suggesting that 130m is a sufficient distance?

MS BREWER: Look, I mean, I think we made those recommendations, in consultation with the Biodiversity Conservation Division and, you know, the information that the Applicant presented in its risk assessment. So with those two,

5 we feel that that setback distance is appropriate and I think would reduce the risk for the nature reserve, noting that some of the other turbines have, you know, in that location immediately adjacent, have already been removed.

MR MARSHALL: I mean, were some of the turbines removed because there were particular corridors of avifauna movement or is it less specific than that?

MS BREWER: I think the turbines that were recommended for, sorry, that were removed, the high risk turbines reduce that barrier effect, which was the concern.

15 MR MARSHALL: Creating a gap for the fauna to move between. Yeah.

MS BREWER: Correct. That's right, and BKD also asked for an increased separation distance between the turbines, particularly around that area, adjacent to the nature reserve.

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MS GRANT: Before we move off biodiversity, one more question on this topic. So there was a very substantial number of credits required to be retired in order to meet the BCD, the Biodiversity Conservation Act requirements. Did BCD provide any guidance about whether those credits are actually available in the marketplace,

25 thinking that the condition talks about them being required prior to the project commencing, I think? And I know obviously it varies for different species and different environments, but do the credits actually exist to be able to be delivered?

MS BREWER: Look, I think the there are a number of mechanisms for securing and retiring credits. And so the availability of credits at this point in time is one mechanism. A lot of Applicants, particularly in this industry, are looking at securing their own land based offsets. So they're going out and looking for their own, you know, areas of land that meet the requirements. We've been very clear with the Applicant that, you know, around the timing, because I think that has been, you

- 35 know, that's obviously a change with the new act and the 2016 Act, but with projects actually coming online, so we've been very clear with the Applicant that that does have to happen prior to the commencement of construction, but the availability of credits, you know, at this point in time in the market might not be a good indicator because, you know, the point in time when they're looking to construct or when they
- 40 might have financial clothes may be different, but also that a lot of Applicants look for land based offsets and they can in some circumstances, they can achieve those land based offsets at a reduced rate to what they would if they were purchasing credits on the market. So it is something that we've been very clear with the Applicant about. I don't think that there's any of the credits that are required that are
- 45 so novel that they, you know, wouldn't be anywhere else in New South Wales. but I think there are a number of mechanisms that Applicants could use to be able to secure retirement of those credits.

MS GRANT: So has the Applicant come back to the Department in response to the proposed conditions, have you had...

5 MS BREWER: Yes.

MS GRANT: Feedback? And they're accepting of those?

MS BREWER: Yes. The conditions of consent have been reviewed by the Applicant.

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MS SYKES: Now I'm mindful of time. we've actually come up to sort of the end of our time allocated for the meeting. Did you have any more questions?

MS GRANT: I've got one question which might hopefully be just a really quick one.You made a comment, Nicole, about, for DAD 01, that it was the potential location.What's actually there at that site at the moment?

MS BREWER: So it's a location approved for a dwelling. So it's a complying development approval, a CDC approval but currently there isn't anything at that location.

MS GRANT: And did the owner of that property make a submission?

MS BREWER: This might not be a quick answer. It is a little bit complicated with the owner of this property. The former owner did make a submission on the project, yes. And we understand that the potential future owner of the project has been consulted by the Applicant as well. But certainly the owner of the property did make an objection to the project, during the exhibitions.

30 MS SYKES: Do you have any more questions?

MR MARSHALL: Well, I'm new to this process, forgive me, and I've got quite a few questions, but I wonder whether there's another process we have available, such as providing perhaps some questions to the Department. I mean, some of them are

35 probably small and quickly dealt with. Others may be more substantial.

MR KWOK: We can continue on for another ten minutes if that works for the Department. Otherwise, we have the option to send some questions on notice for the Department to respond to.

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MS SYKES: So on the call from the Department, is that okay to continue for another ten minutes?

MS BREWER: Yes. That's fine with us.

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MR MARSHALL: Actually, it occurred to me as we were talking about the biodiversity issues, I wonder whether we will hear or have a chance to talk with the

people from the biodiversity area of the Department through this or are there any of our colleagues are from that area on the call at the moment? I'm just wondering if we if we start deep diving into some of these things, they may not be questions you're across to answer.

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MS BREWER: So our assessments included that consultation with the biodiversity division and with all of the relevant areas within government, and they've provided that, you know, their responses, through the process. But we'd be happy to facilitate questions, you know, that you might have, to the biodiversity area, but, they would ordinarily, because we're coordinating the assessment, would ordinarily come

10 ordinarily, because we're through the Department.

MR MARSHALL: So you'll manage the communication. Okay. All right. well, I mean, I guess, one of the questions, again, relating to biodiversity was, I mean, the Box-gum woodland seems to be the kind of key vegetation, biodiversity issue. I'm just wondering, and it seems as though a relatively small area is still to be cleared,

- just wondering, and it seems as though a relatively small area is still to be cleared, but I'm wondering, did you consider what additional measures might be taken which would indeed avoid entirely Box-gum woodland clearance.
- 20 MS BREWER: So, you're right. Box-gum woodland, is a potential issue on the project, and it is a potential serious and irreversible impact entity. Given the extent of box-gum woodland in the locality, it's not possible to completely avoid impacts while maintaining a viable wind farm project. The Applicant's accredited ecologist assessed the potential SII risk in accordance with the biodiversity assessment
- 25 method, and concluded that there would not be a serious and irreversible impact on Box-gum woodland in forming it. Yeah, sorry.

MR MARSHALL: I guess I take the point that it's, you know, 0.05% or something of, box-gum woodland in the vicinity. But given that it is, kind of high up there in

- 30 terms of a threatened ecological community or some such, I guess, in order to avoid cumulative impacts of, you know, the gradual erosion of box-gum woodland, you know, we might look carefully about any impacts on that. And it just, you know, I mean, I wondered, for example, whether further micro siting, for example, which is talked about, with regard to other impacts, I wondered whether, you know, there are,
- 35 I mean, I know the conditions talk about, seeking to further avoid, impacts on, threatened ecological communities, but I just wonder whether, in your review, you'd thought through, well, you know, if they shifted the road, you know, 100m to the left or 100m to the right, or a turbine, you know, 50m this way or that way, you know, whether we might yet reduce that further impacted woodland.
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MS BREWER: Look, I think that they... You're right. The conditions of consent do have that requirement to further avoid through that detailed design but we did go through this at length, as we do with all of our projects for the first principle under the Biodiversity Conservation Act, which is to avoid and we push them really hard to

45 avoid as much as possible. And so, I guess where we've landed, I think, is where we feel is a reasonable balance and we don't feel that for that entity, you know, in respect to the serious and potential serious and irreversible impact that it would cause

a serious and irreversible impact. There is some clearing, but we don't consider that that is an extent that would cause that entity to become extinct. So I think with the conditions of consent that push them to avoid more as they're going through the detailed design, and quite significant effort that has gone through over a very long

5 process of you know, this assessment, we feel that we've really challenged that through the assessment process, as we've gone.

MR MARSHALL: Can I move on to, the offsets issue which, forgive me, I'm not an expert in natural heritage or ecology, but I've brushed up against it quite a lot over
the years and I've heard from colleagues uncertainty about the effectiveness of offsets, and my particular question in this case is, for example, with regard to, impacts on species, the birds and the bats, and I think I'm right in thinking that there are offsets proposed in those cases. I'm just wondering whether those offsets are, like for like in terms of the species and also in terms, you know, are being sought in terms of the local populations of avifauna, for example.

MS BREWER: Look, I think it's fair to say that the, the BAM or the biodiversity assessment method and the way of calculating the credits is quite complex with a lot

- of things that go into the credits, that are required for projects, where an impact is, where they are going to have an impact. All of those factors are taken into account through that process of calculating the credits and also through the process of retiring credits. So there are all sorts of mechanisms for equivalency if that's required. And making sure that those offset areas are sufficiently surveyed. And you know, the scientific data is behind those areas that are proposed for land based offsets, such that
- 25 it's confirmed that a land based offset does have the species that are proposing to be offset using that area. So I think that that is really the structure, and mechanism of the BAM and all of those calculations through the Biodiversity Conservation Act.
- MR MARSHALL: I'm sorry. It's kind of a rushed moment to try and get one more question, if I might. Just with regard to Aboriginal heritage, and forgive me if I've missed this in the background documentation, but have the traditional owners of this country been consulted? Were they involved in the survey work? I mean, the sites identified are all archaeological. there are no, kind of intangible cultural heritage sites picked up, which seems a little unusual given it seems an area with, kind of,
- 35 interesting topography which usually picks up sites of significance otherwise. So, have the traditional owners, were they involved, and provided advice in the due diligence survey work?
- MS BREWER: So there are guidelines and requirements, as you'd be aware, that, you know, registering of Aboriginal parties and that were consulted through the process of the heritage assessment and the ACHA, and also we sought the advice of our heritage experts within government. So all of, yes, the registered Aboriginal parties were involved in the process, as well as consultation with Heritage New South Wales.
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MR MARSHALL: And those Aboriginal people identified no sites of significance to themselves.

MS BREWER: Look, I mean, I understand that the process was conducted in consultation with them. I can take that on notice, but I think that the documentation, and the consultation that was done with those parties sits within the ACHA but we can provide more advice if that's something that you're after.

MR MARSHALL: Thank you. Yeah.

MS SYKES: So I think given the time and really appreciate, you know, the detail that you've provided in the meeting this morning. We have gone a bit over time and appreciate you staying online as well for being able to answer some of those additional questions. So I think at this point we might call the meeting to a close. So thank you so much, Tatsiana, Anthony, Clay and Nicole for the meeting this morning.

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MS BREWER: Thank you, commissioners.

MS GRANT: Thank you.

20 MR MARSHALL: Thanks.

#### **<THE MEETING CONCLUDED.**