

5 December 2017

**NSW Planning Assessment Commission Determination Report
Beryl Solar Farm (SSD 8183)**

1. INTRODUCTION

On 23 October 2017, the Planning Assessment Commission received from the Department of Planning and Environment a development application from First Solar Pty Ltd to construct and operate a solar farm west of Gulgong in the Mid-Western local government area.

The Department referred the development application to the Commission for determination in accordance with the Minister for Planning's delegation because the Department received more than 25 public submissions in the nature of objections.

The Commission constituted to determine the development application comprises Paul Forward (as chair), Dianne Leeson, and Lynelle Briggs AO Chair of the Planning Assessment Commission.

1.1 Summary of development application

The development application proposes to construct and operate a solar farm with nominal capacity of 87 megawatts. The 332-hectare project site is located off Beryl Road, about five kilometres by road west of Gulgong. The project includes possible upgrades in the future to allow for new technology (and potentially higher capacity), but fixes the overall project footprint at 225 hectares.

In detail, the project involves installation of about 950,000 solar panels on either fixed or solar-tracking mounting frames, up to 2.7 metres high above ground level. The solar panels would be installed in arrays, with each array connected to an inverter station, each about 2.9 metres high above ground level. The solar farm would be connected to the national electricity grid at Transgrid's Beryl substation to the north, via a short, overhead, 66 kilovolt transmission line.

The project includes several road upgrades for construction traffic, landscaping works to screen views to the solar-farm, various ancillary works and buildings, and a subdivision to excise the current landowner's dwelling from the project site.

First Solar expects 30-years of operational life for the solar farm. The proposal includes decommissioning and removal of above ground infrastructure at the end of that period, although a time limited approval is not proposed. Upgrades from time to time may extend the operational life of the solar farm beyond 30-years.

1.2 Project need

The Department reports the development of renewable energy sources is currently experiencing rapid growth. This growth follows Australia's commitment to the Paris Agreement, which is to reduce greenhouse gas emissions by 26% - 28% below 2005 levels by 2030, and the Commonwealth Government's *Renewable Energy Target*, which requires more than 20% of Australia's electricity to come from renewables by 2020.

In addition, the NSW Government aims to achieve net zero emissions by 2050 and has in place a *Renewable Energy Action Plan* to help achieve that aim. The Department reports that an installed capacity of 87 megawatts would be sufficient power for around 28,000 homes, and is consistent with

Commonwealth and State objectives. First Solar estimates a capital investment value of \$171 million, 150 construction jobs, and 3 operational jobs.

2. THE DEPARTMENT'S ASSESSMENT REPORT

The Department of Planning and Environment carried out an assessment of the proposed solar farm under section 79C and other relevant provisions of the *Environmental Planning and Assessment Act 1979*, which was submitted to the Commission for consideration. The Department's assessment report identified key issues including land use compatibility, environmental planning instruments, impacts to agricultural and residential land, visual, acoustic, biodiversity and traffic impacts.

The Department's report included a summary of its consideration of environmental planning instruments in Appendix C and a summary of its statutory considerations and assessment against the objects of the *Environmental Planning and Assessment Act 1979* in Appendix D. The Department's report concluded, among other things:

"... the Department has recommended removal of the project infrastructure within the portion of the site zoned R5 Large Lot Residential, as well as additional setbacks and vegetation screening along the majority of the northern and western development footprint boundaries adjacent to land zoned R5..."

On balance, the Department believes that the project is in the public interest and should be approved, subject to the removal of the project infrastructure within the portion of the site zoned R5 – Large Lot Residential."

3. COMMISSION'S MEETINGS AND SITE VISIT

As part of the consideration of the proposal, the Commission met with:

- the Department of Planning and Environment on 7 November 2017;
- First Solar on 7 November 2017;
- Mid-Western Regional Council on 21 November 2017; and
- the landowner of Lot 59 on 21 November 2017

The Commission also visited the site and conducted its public meeting in the Gulgong RSL Club on 21 November 2017. Records from the meetings listed above are in **Appendix 1** and records from the public meeting are in **Appendices 2 and 3**.

4. ADDITIONAL INFORMATION

The Commission received from First Solar an unsolicited report titled "Supplementary Environmental Impact Statement Permissibility" dated 17 November 2017. The report sets out an additional argument against the Department's recommendation for the removal of project infrastructure from land zoned R5. These arguments are set-out and considered by the Commission in section 5.4 below.

The report was submitted to the Commission after the Department's referral of the development application for determination. The report was promptly made available to download from the Commission's website, although the Commission acknowledges the very short time period for the public to review the report prior to the public meeting. Nevertheless, the Commission has not been persuaded by the arguments in this report, for the reasons set out in section 5.4 below.

The Commission also received a map and additional information about the noise impacts of the inverters (see **Appendix 4** and discussed in the sections below).

5. COMMISSION'S CONSIDERATION

In this determination, the Commission has considered carefully:

- all information provided by First Solar;
- the Department's assessment report;
- advice and recommendations from government agencies including Council;
- all oral and written submissions;
- section 79C of the *Environmental Planning and Assessment Act 1979* and the matters it requires the Commission to consider.

Key matters for consideration identified by the Commission include visual impacts, noise impacts, the community consultation carried out by First Solar, and land use compatibility in the R5 zoned land.

5.1 Visual impacts

The project site is gently undulating, and there are areas of elevated topography in the surrounds. There are views to the site from private residences, and public vantage points such as the Castlereagh Highway, particularly so where those vantage points are elevated. Some of the remnant vegetation on the site would be retained and First Solar proposed to augment it for additional visual screening.

Visual impacts were an issue of concern to the community members that spoke at the public meeting, and featured strongly in written submissions. The picturesque countryside, they said, would be transformed into an industrial landscape with consequences for the rural lifestyle of local people, the value of their land, and the historical and touristic values of Gulgong. The Department's conditions and the proposed vegetation were considered to be inadequate because new trees would take too long to establish, they would not effectively screen the whole solar farm, and in any case, they could further impact on the rural and hinterland outlook enjoyed by nearby residents.

The Department reported that:

- there would be negligible light spill beyond the horizontal plane and it would not impact observing conditions for Siding Spring Observatory, 125 kilometres to the north-west;
- visual impacts would be limited to residences within one kilometre of the project, due to a combination of distance and screening from topography and existing vegetation;
- views from western residences would be largely screened by existing vegetation;
- views from eastern residences (including in the township of Gulgong) would be limited because of the intervening topography and distance; while
- only residences located to the north and north-west would be visually impacted by the project and these residences are located within land zoned R5.

For these affected residences, the Department recommended deletion of infrastructure on the intervening R5 land (this deletion has additional reasons, discussed section 5.4), a 30-metre setback to the R5 land, and screen planting on the edge of the R5 land. The Department recommended a condition requiring screen planting to be "effective" within three years. Even with these mitigation measures, the Department said the residence on Lot 59 is elevated and would continue to have direct views of the solar farm. Consequently, the Department recommended a condition that First Solar provide supplementary screening vegetation at this property.

The Commission visited Lot 59 and spoke with the landowners. While the Department reported that some earlier agreement had been reached about mitigation measures for this property, the landowner continued to raise concerns. It seemed unfair, the landowner said, to have screen planting on Lot 59 to deal with the solar farm impacts, and planting close to the residence would intrude on views to the hinterland. The Commission empathises with the landowner's views.

While the Commission is not persuaded that the overall visual impacts to Lot 59 are sufficient to reject or further amend the solar farm (it would appear in the foreground of views to the hinterland, for example, but not block or obscure those views), the Commission does consider that additional oversight is required of First Solar's landscaping efforts to ensure maximum effectiveness of plantings on the project site.

The Commission notes that to achieve effective screening within three years, as well as long-lasting screening over the life of the solar farm, First Solar will need to act immediately with a landscape strategy. The landscaping must include immediate planting of fast growing tree species, as well as slower growing, but taller and longer lasting tree species. Careful maintenance will be required to ensure sufficient growth to be "effective" both in three years' time and for the duration of the solar farm operation.

The Commission considers that this landscaping work should be scrutinised by an independent auditor after construction begins (and at any other time as directed by the Secretary of the Department) to ensure that appropriate species with adequate planting density have been planted and that arrangements are in place for their proper care (this independent auditor also has wider benefits discussed in section 5.3).

The Commission also considers that screening vegetation on Lot 59 should be required of First Solar, but it should be optional for the landowner, on request, and such an option should exist until the screen planting on the project site is mature enough to allow the landowner to decide whether to exercise the option.

The Commission has adjusted the conditions to achieve these outcomes (see Schedule 3, condition 9 and Schedule 4, condition 5). These additional measures also have wider benefit as they ensure maximum effectiveness of the screen planting for other private and public vantage points identified by the Department.

Acknowledging the concerns raised by the community about the impact of contemporary solar infrastructure on the historic and tourist setting of Gulgong, the Commission visited the lookout at Flirtation Hill. In the Commission's view, the solar farm is quite distant from the town and, while it may be visible from the lookout or other distant vantage points, it would be quite close to the ground, and not a particularly intrusive element in the landscape. The Commission does not consider these wider-scale visual impacts warrant a rejection or further amendments to the solar farm.

5.2 Noise impacts

While solar panels themselves are silent, the electricity inverter units that are connected to each solar array, as well as the motorised solar tracking devices that point the solar panels at the sun, have a noise profile. There are several residences nearby to the solar farm that could be impacted by noise from these sources, and there are also the temporary construction noise impacts to consider.

Many speakers at the public meeting, and in written submissions, expressed significant concern about the potential noise impacts on the locality. They said that their tranquil lifestyle would be interrupted by the constant hum of the inverter units, and the periodic sound of the solar-tracker motors. The speakers also expressed doubt about First Solar's noise predictions. They said that the project site occurs in a natural amphitheatre, which extends the reach of noise from Transgrid's existing transformer nearby, and such other sounds as the public-address system for the Gulgong polocrosse events.

Of construction noise impacts, the Department reported:

- up to five residences may be subject to temporary noise up to 12 dB(A) above the ‘noise affected’ criterion of 40 dB(A) when piling works occur at the project boundary adjacent to these residences;
- All noise impacts are below the ‘highly noise affected’ criterion of 75 dB(A); and
- First Solar has prepared a draft Construction Noise Management Plan, which specifies appropriate noise mitigation work practices, including hours of operation and scheduling to minimise noise, quieter equipment, informing affected landowners, and establishing a complaint handling procedure.

The criterion referred to by the Department are specified in the *Interim Construction Noise Guidelines*, produced by the Environment Protection Authority. The Commission is satisfied with the Department’s appraisal of construction noise impacts and notes a recommended condition requiring implementation of the management plan. While inconvenient to the affected residences, construction activity would be temporary, within the noise guidelines, and carried out according to the management plan.

First Solar’s operational noise predictions were based on sound power levels of 88 dB(A) at source for each of 22 inverter stations, each having three inverters, and 78 dB(A) for each of 3,600 tracker motors. A 5 dB(A) ‘penalty’ was added to the inverters, because of their constant hum. First Solar report that the noise predictions took account of receiver location, and sound reductions that result from separation distances, ground type, any sound barriers that may exist, both natural and built, and any differences in elevation between sources and receivers.

Noise results were produced for each of three meteorological conditions; calm, gentle breeze (which carries sound further) and night time temperature inversions (which also carries sound further). First Solar’s noise predictions for each of the ten nearest receivers is reproduced in the table 1 below. These results show the noise predictions to be well below the “intrusive criteria” for noise impacts in the Environment Protection Authority’s *Industrial Noise Policy*.

Table 1: First Solar’s noise predictions at each of the 10 nearest receivers.

Receiver Location	Intrusiveness Criteria ¹	Predicted Operational Noise Levels, L _{Aeq, 15min}			Comply? (Yes/No)
		Calm & Isothermal Conditions	Slight to Gentle Breeze	Moderate Temperature Inversion ²	
Receiver R1	35	26	30	30	Yes
Receiver R2	35	27	32	32	Yes
Receiver R3	35	27	32	32	Yes
Receiver R4	35	26	31	31	Yes
Receiver R5	35	<20	25	25	Yes
Receiver R6	35	26	31	31	Yes
Receiver R7	35	26	32	32	Yes
Receiver R8	35	<20	24	24	Yes
Receiver R9	35	21	26	26	Yes
Receiver R10	35	22	27	27	Yes

Notes: 1. Criteria for Day, Evening and Night periods

2. Applicable for the Night time period only

The Commission notes the intrusive criteria is not an inaudible criterion and the solar farm is not required to be inaudible under the *Industrial Noise Policy*. However, owing to the depth of concern expressed by the community about noise impacts, the Commission made further enquiries particularly about the inverters. The additional detail is in **Appendix 4**.

Noise models often tend to be conservative and use sound power levels and equipment locations to predict the worst-case scenario for noise impacts. In this case, the sound pressure level of the inverters is 77 dB(A) at one metre, and the noise model conservatively converted this to a sound power level of 88dB(A) at source, in order to predict noise impacts. The Commission also notes the inverters would be located within the solar farm so that the solar panels themselves assist in attenuating noise emissions, and that none would be located on R5 zoned land, increasing the distance to receivers that was otherwise used in the noise predictions, and therefore increasing the amount of sound attenuation over distance and further reducing the noise impacts below the predicted noise impacts.

The Commission is satisfied that noise impact predictions for the solar farm are conservative. The predicted noise impacts are well below the relevant criteria in the *Industrial Noise Policy*. Notwithstanding, the Commission has included conditions requiring First Solar to implement a complaint handling procedure, so that residents have a first point of contact with First Solar to raise noise issues (see Schedule 4, condition 1), and to report incidents and non-compliance to the Department (see Schedule 4, conditions 3 and 4). Complaint records and First Solar's responses must be published on First Solar's website and ongoing issues can become the subject of compliance action by the Department. The Commission has also updated the map in Appendix 1 of the consent with the new map showing the inverter locations as provided to the Commission and shown in **Appendix 4** of this report.

5.3 Community consultation

The Commission heard concerns from speakers at the meeting about First Solar's community consultation. Some people felt that their views, or the views of others, or indeed whether they had been contacted all, had been misrepresented in First Solar's community consultation report. Others raised concern about the level of detail explained by First Solar, and said they were unable to work-out, among other things, the value of the proposed community enhancement fund. The Commission also received a number of pro-forma letters wherein local people declared how they first became aware of the proposal. The Commission notes a relatively high proportion of people answered "word-of-mouth" instead of other options such as a First Solar mail-out, or community information event.

The Commission has no way of verifying the accuracy of these claims, although it finds the allegations concerning. Notwithstanding, the Commission notes that its public meeting was well attended, and the eight registered speakers, as well as written submissions, covered a broad range of issues that the Commission feels was an adequate representation of the community's concerns.

The Commission has, for the reasons outlined earlier in this report, imposed conditions requiring First Solar to have a complaint handling and recording procedure, with complaints and the company's response to be published on First Solar's website. The Commission has also conditioned the requirement for an independent environmental audit part way through construction to ensure the appropriate mitigation measures are commenced at an early stage. The Commission expects with these measures, any grievances with First Solar or the development would ultimately be raised to the Department of Planning and Environment and, if appropriate, compliance action could be taken.

5.4 R5 zoned land

The Department made a comprehensive argument to delete all solar infrastructure from the area of land within the project site zoned R5 Large-lot Residential. In summary, it found that the relevant

Environmental Planning Instruments provide strategic policy reasons against solar farm developments on R5 land, and a clear intention to prevent the development of a solar farm on this particular site. Speakers at the public meeting agreed with this view, while maintaining their overall objections to the solar farm.

First Solar commissioned a report titled “Supplementary Environmental Impact Statement Permissibility”. The report was submitted directly to the Commission after the Department referred the matter, as mentioned in Section 4 above. The report disputed the Department’s reasons for deleting the proposal from R5 land, arguing, in summary:

- the Commission can consent to partially prohibited development under section 89E of the *Environmental Planning and Assessment Act 1979*;
- the proposal satisfies the objects of the *Environmental Planning and Assessment Act 1979* and those of *State Environmental Planning Policy (State and Regional Development) 2005*;
- it is reasonable and intended that these provisions override the *Mid-Western Regional Local Environmental Plan 2012*;
- the loss of R5 zoned land will have minor impacts as there is other R5 land nearby;
- in any case, the environmental and social benefits of rural lifestyle development are dubious, while the benefits of a solar farm are quantifiable and address National and State objectives;
- the deletion would reduce generation capacity by about 15% or 13 megawatts;
- the solar farm has general land use merit and can be decommissioned to make the land available for other uses; and
- as a solar farm would create a desirable buffer between R5 land to the north and east, and agricultural land to the west.

The Commission is unpersuaded by these arguments. The Commission finds the Department’s arguments more compelling as they properly:

- address all relevant Environmental Planning Instruments, rather than overriding some;
- illuminate strategic planning objectives that clearly underpin the R5 zone in this location;
- identify that the solar farm conflicts with the R5 zone objectives; and
- acknowledge community concerns about the location of the project site between residential and agricultural land, and the overall improvement in rural character, visual and noise impacts that result from deleting the infrastructure from the R5 land.

For these reasons, the Commission has decided not to consent to solar farm infrastructure on R5 zoned land within the project site and notes that such infrastructure has been deleted from the map in Appendix 1 of the consent.

5.5 Other issues

The Department’s report addresses a range of relevant issues including potential impacts on agricultural land, traffic, biodiversity, energy security, water and soil, heritage, hazards including bushfire hazards, the mineral resource titles that exist on the land, and the subdivision component of the development. The Commission also acknowledges the wide range of concerns raised by the community in respect of issues such as bushfire hazards, energy security, and whether the proposed capacity of the solar farm can be achieved. The Commission has considered carefully the arguments set out by the Department and the consent conditions it recommends to address residual impacts. The Commission has also considered carefully the matters it is required to consider under section 79C and other statutes of the *Environmental Planning and Assessment Act 1979*. The Commission is satisfied that these matters have been adequately addressed and the recommended conditions are appropriate to impose.

6. COMMISSION'S FINDINGS AND DETERMINATION

The Commission has considered carefully First Solar's solar farm proposal, the Department's assessment report and relevant matters for consideration under section 79C and other statutes of the *Environmental Planning and Assessment Act 1979*. The Commission has also considered the advice and recommendations from the relevant government agencies, Mid-western Regional Council, and written and oral submissions from the community.

The Commission was persuaded by the depth of concern expressed at the public meeting and in written submissions to investigate the details of visual and noise impacts of the development. The Commission found need for additional oversight of First Solar's efforts to carry out landscape screen planting to ensure they are suitably effective in the appropriate time frame. Therefore, the Commission imposed a condition for an independent audit after construction begins, which also has wider benefits to the community in ensuring the development proceeds in a compliant manner.

While finding the predicted noise impacts to be conservative, and within the guidance of the Environment Protection Authority's *Industrial Noise Policy*, the Commission has found need for First Solar to implement a complaint handling and recording protocol, and incident reporting, all of which must be published on First Solar's website. This will ensure local people have recourse in the case of unexpected and unacceptable noise impacts. The complaint handling and recording protocol also has wider benefits to the community in respect of other unexpected impacts of the development.

The Commission considered carefully arguments for and against reinstatement of solar infrastructure on land zoned R5 Large Lot Residential. The Commission was unpersuaded by First Solar's arguments, and ultimately favoured the Department's more compelling and complete reasons to delete the infrastructure from the R5 land. The Commission found that the renewable energy benefits of the proposal, excluding the R5 land, correspond to National and State objectives, while also furthering the aims and objectives of the *Environmental Planning and Assessment Act 1979* and its Environmental Planning Instruments, including *Mid-Western Regional Local Environmental Plan 2012*.

On balance, and for the reasons set out above, the Commission has determined to grant consent to the development application subject to the conditions set out in the instrument of approval.



Mr Paul Forward
Chair of the Commission



Ms Dianne Leeson
Member of the Commission



Ms Lynelle Briggs AO
Member of the Commission

APPENDIX 1
RECORDS OF COMMISSION MEETINGS FOR THE DETERMINATION PROCESS

Notes from meeting with the Department of Planning and Environment

This meeting is part of the determination process.	
Date: Thursday, 7 November 2017	Time: 9:00am
Project: Beryl Solar Farm	
Meeting place: Commission Office	
Attendees: Commission Members: Paul Forward (Chair); Dianne Leeson and Lynelle Briggs AO. Commission Secretariat: David Mooney (Team Leader) and Jorge Van Den Brande (Planning Officer) Department of Planning and Environment: David Kitto (ED Resource Assessments & Business System), Clay Preshaw (Director Resource Assessment) and Diana Mitchell (Senior Planning Officer)	
The purpose of the meeting was for the Department to explain the proposal and comment on the Department's assessment report.	
Issues raised in submissions <ul style="list-style-type: none"> The Department received 37 submissions, which included 27 objections from the community that raised concerns on amenity impacts such as visual, noise, traffic, and land use compatibility. Agency responses <ul style="list-style-type: none"> No government agencies objected to the project, but they did provide comments on the recommended conditions in relation to road upgrades and biodiversity offsets. Mid-Western Council supports the project except for the R5 land portion as Council has plans for residential developments. Status of biodiversity offsets <ul style="list-style-type: none"> Applicant originally proposed to offset on the R5 zone. Department recommended condition that R5 zoned land not be used for offsetting. Applicant's landscape strategy, screening and buffers <ul style="list-style-type: none"> Applicant is required to undertake visual screening on the perimeter of the site and at key receivers. Applicant is also required to undertake road upgrades and to implement a traffic management plan. Land use and zoning <ul style="list-style-type: none"> About 80% of the project sits in RU1 zone, and the rest on R5 Large Lot Residential. The Department said there were compelling policy and strategic reasons to delete solar infrastructure from R5 zoned land. With the removal of R5, the project would still generate about 70 MW, enough to power 26,000 homes. 	
Documents tabled at meeting: Maps	
Meeting closed at: 10.30am	

Notes of meeting with the applicant

This meeting is part of the determination process.	
Date: Thursday, 7 November 2017	Time: 10:30am
Project: Beryl Solar Farm	
Meeting place: Commission Office	
Attendees: Commission Members: Paul Forward (Chair); Dianne Leeson and Lynelle Briggs AO. Commission Secretariat: David Mooney (Team Leader) and Jorge Van Den Brande (Planning Officer) The applicant: Steve Jackson (APAC Region Lead), Jennifer Abbott (APAC Corporate Communications & Public Affairs) and Thomas Best (Project Manager)	
The purpose of the meeting was for the applicant to explain the proposal and comment on the Department's assessment report.	
Company history <ul style="list-style-type: none">• Company was established in 2008 and executes projects with an end to end participation.• Approximately 18 gigawatts installed worldwide and a further 5 gigawatts are planned.• The applicant has engaged in extensive research and development of solar panels to produce film technology, which will be applied in Gulgong.• Economic life of the panels is around 30 years. Visual impacts and planting strategy <ul style="list-style-type: none">• Site provides a combination of distance and screening from topography and existing vegetation.• Residences to the north and north west of the site would be visually impacted, however the impact would be minimal as the development is low-lying.• Applicant proposes tubestock planting of fast growing species to allow initial screening and then a more permanent screening with slow growing species. Comments on the Department's conditions <ul style="list-style-type: none">• Applicant wishes for solar infrastructure to be installed on R5 land, which is not suitable for R5 development as it is flood prone.• Hydraulic modeling confirmed that solar farm infrastructure could be built over the flood prone area with no impacts to surrounding land.	
Documents tabled: Maps and presentation of the proposed development.	
Documents to be provided: Response to the Department's assessment report, details of company technology and description of energy allocation.	
Meeting closed at: 11:30 am	

Notes of meeting with Mid-Western Regional Council

This meeting is part of the determination process.	
Date: Wednesday, 21 November 2017	Time: 08:30am
Project: Beryl Solar Farm	
Meeting place: Council Office	
Attendees: Commission Members: Paul Forward (Chair); Dianne Leeson and Lynelle Briggs AO. Commission Secretariat: David Mooney (Team Leader) and Jorge Van Den Brande (Planning Officer) Mid-Western Regional Council: Brad Cam (General Manager), Julie Robertson (Director Development) and Lindsay Dunstan (Manager Statutory Planning),	
The purpose of the meeting was for Council to provide their comments to the Commission on the Department's assessment report and the proposed development.	
The Council briefed the Commission on the following matters: Community Consultation <ul style="list-style-type: none">• Council believes the applicant's community engagement has been reasonably thorough and Council's suggestions had been taken up. Noise Impacts <ul style="list-style-type: none">• Community expressed concerns about the operational noise impacts in relation to the invertors and tracker motors. R5 Zoned Land <ul style="list-style-type: none">• Council's LEP doesn't allow the project for R5, although the Council acknowledges this is a decision for the Commission.• The R5 area of the project does not have high demand for usage and it has been zoned since 2012.• Council has not carried out flood modelling of the area. Other Matters <ul style="list-style-type: none">• Council is satisfied with the applicant's traffic measures, road upgrades and landscape strategy.• Council is satisfied with the Department's recommended conditions.	
Documents tabled: NA	
Meeting closed at: 09:30am	

Notes of site visit to Lot 59

This meeting is part of the determination process.	
Date: Wednesday, 21 November 2017	Time: 11:15
Project: Beryl Solar Farm	
Meeting place: Lot 59 DP 755434	
Attendees: Commission Members: Paul Forward (Chair); Dianne Leeson and Lynelle Briggs AO. Commission Secretariat: David Mooney (Team Leader) and Jorge Van Den Brande (Planning Officer) Landowner of Lot 59 – Alan and Danielle Griffiths, and Greg Griffiths	
For the landowner to highlight concerns	
<ul style="list-style-type: none">• Mr and Mrs Griffith explained concerns about visual impacts and noise impacts from their home and property, which sits immediately opposite the proposed solar farm.• Mr Griffiths highlighted elevation difference of 9 metres between dwelling and solar farm, instead of 5 metres as quoted in Department's assessment report.• Mr Griffiths explained site selection rationale for dwelling currently under construction – the beauty of the views of the valley – and the nature of their engagement with the applicant.	
Documents tabled: Photos of the site from various vantage points	
Meeting closed at: 12 Noon	

APPENDIX 2
FINAL LIST OF SPEAKERS

Planning Assessment Commission public meeting for the determination of the Beryl Solar Farm

Date & Time: 2:30pm, Tuesday 21st November 2017

Place: Gulgong RSL Club, 64 Herbert Street Gulgong NSW 2852

List of Speakers

1. Greg Griffiths (Gulgong/Beryl Solar Farm Action Group)
2. Luke O'Connell
3. Rebecca O'Connell
4. Lyndsay Jones
5. Allan Griffiths
6. Ruddie Malone
7. Casey Deryk
8. Vicky Walsh

APPENDIX 3
SUMMARY OF ISSUES FROM WRITTEN AND VERBAL SUBMISSIONS TO THE PUBLIC MEETING

Visual

- Topography of the site will not mitigate the visual impacts from the project.
- The applicant's photomontages are misleading and exclude some properties.
- Planting will take years to reach enough height to cover the views of the solar panels.
- The height of the solar panels is not clear
- Planting will not allow the views from residences to be enjoyed.
- Glare from solar panels have not been considered.

Noise

- Noise impacts must be fully explained, as they are not limited to construction.
- The Project poses significant noise impacts from the cooling systems running day and night because of the high temperatures.
- Cumulative noise impacts will be over 114dB during operations.
- Applicant's noise model does not consider the effects of landscape form in the results.

Benefits

- The benefits for the community are minimal and outweighed by the negative effects.
- Benefits of the project will be limited to three fulltime positions that have already been allocated.
- Economic benefits to the township of Gulgong are unknown.

Other matters

- Community members do not oppose sustainable energy but the location of the project itself.
- Project's output production capacity is questionable as dust layers will sit on top of the panels.
- Greenhouse gases from the manufacturing and installation have not been addressed.
- Construction of the infrastructure will be funded by the taxpayers.
- Project poses bushfire risks and will destroy agricultural land.
- Applicant has not contacted all the residents in the area.
- The project's long-term impacts are unacceptable.
- Views from a property are assets that affects the overall value the property, if views are affected, property value is affected.

APPENDIX 4
ADDITIONAL INFORMATION ABOUT INVERTERS