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Presentation to IPC Re Gunnedah Solar Farm

Mr Chairman.

I am Phillip Glover and my family and I own and live at [redacted]... opposite the proposed site on the river side. We have lived there now for 24 years. I assume that you have read my original submission to DoP .. there is a lot of background information there.

I am in favour of solar energy ... but I cannot understand the logic of building a 750 acre solar farm in a flood way. This solar farm is in the wrong place.

Before I start on the flooding issue there are other items in the DoP documents that don't ring true. I want to briefly touch on two. Firstly under the comments on use of Prime Agricultural land on page 3 it says "the landholder is not effectively able to cultivate" this land. This is not true, they would not have paid millions of dollars to buy a dud farm. To my knowledge this land grew cotton and wheat last season. If you look at the aerial pictures in the reports you can see where the land has been cultivated. I do not understand what end is achieved by presenting untruths in the document.

The report says that there were studies done on noise. There may well have been traffic noise studies done, but I do not believe any one came to our home site to monitor construction noise being made on Myalla. On an almost treeless plain noise travels much further than most people would think. We often hear tractors starting or irrigation motors running. We are very concerned about the huge amount of noise that will be made during the construction phase, which we believe will impact us and most people around us for a full year. There has been no offer from Photon to provide alternate accommodation for any residents that will be impacted by

noise, as I am aware happens in other projects. It will be very stressful for family members that are home during the day.

Flooding. We all saw on the news last night the chaos Sydney was in with some minor flooding. Believe me all floods cause grief.

(first slide)

On page 14 it states that there are "no natural waterways" on the site. The Carroll to Boggabri flood study clearly shows a major discharge from the Namoi River on Galton's property which heads straight through the proposed solar farm. Pitt and Sherry / Photon have definitely tried to address the flooding issue, and we have seen some improvements to the proposal. The fenced area has been moved back a little out of the deepest water, and there is now talk of flood fences. These adjustments are welcome, and an admission that there is a significant problem, but I do not believe that even yet they have a real understanding of the volume and speed of the discharge from the river, the size of which we hope to show the panel tomorrow.

This slide shows the flows of water across the floodplain during the 1955 flood, taken from the Carroll to Boggabiri Floodplain study. It shows 2.511 m^3/sec passing by Carroll, and a major split at Galton's property, across from the Solar Farm proposed site. (see green line heading north from the red dot). 1.276 m^3/sec passes over the farm, and only 1.2401 m^3/sec continues on down the river.

In the current plans they have included sections of drop down fencing and the new "model" shows little effect on flooding. However, it appears that they are wanting to install springs and let the pressure of flood water and debris trigger the opening of the fence.

The method of opening the fence needs to be immediate and failsafe. When farmers use drop down fencing they manually drop the fences prior to the flood arriving. I can't imagine a spring loaded flood fence dropping down until the water and debris would be at least 50 % of the height of the fence .. so their flood model is still oversimplified, threatening my family and neighbours' homes and property.

A comment in this latest document is concern for the downstream side of the solar farm (Recommendations 22a).... again this shows a total lack of understanding of flooding. They should be worried about the upstream properties, because as floodwater strikes a barrier it bounces back against the flood, building up the water like the bow-wave of a boat.

All floods are unpredictable and many arrive at this site very quickly. For example , In early September 1998 it started to rain late in the afternoon .... overnight there was 125mm of rain in the catchment and by lunch time the next day our farm was totally inundated and then isolated for 5 days. It was the 4th flood for the year. We have never had very much notice of the flood arriving.

(next slide)

I would suggest some automatic electric mechanism be designed and tested and if successful used to drop all the panels simultaneously when the flood watch for the Peel / Namoi is issued. To manually drop this fence .... probably 2-3 km of fencing it would require a team of workers and 4 WD s to get it down as the flood is approaching and there could be real danger that they may be trapped at the site for the duration of the flood and not complete the job. My understanding is that there would be at most 2-3 people employed during the operation phase of this project – I question whether this would be enough at short notice.

There needs to be a proper plan for dropping the fence with strict protocols in place to make sure it will be done in a timely manner. Approval for this project should not be given until there are iron clad guarantees for a safe and acceptable design and operational procedures in place.

I am further concerned that in all the modelling which has already been done, I have not seen any mention of the poles supporting the 480,000 + panels. I have not seen how many poles will be put into the 750 acres to hold them up ....but they apparently need ten pile drivers for most of a year to put them in. I have not seen any modelling on what these poles are going to do to the speed of water flowing through the solar farm. I can only imagine that they will slow the water down, further building up the water upstream of the project.

I was recently sent a 27 page document on an innovative fence design for an 11 acre solar farm in the Moree Plains Council area where the 1% flood level is 200 - 300 mm deep on the site. The Moree council is very aware of flooding and seems to be more careful than the Dept of Planning in this instance.

Mr Chairman , I would like to suggest that this commission appoint a another consultant with more experience with flooding rivers in the western areas to review and resolve the issue of fencing and flooding. This needs to be done keeping in mind the extent of the flooding in this area, the suggestion of only a partial drop down fence and whether it can be dropped in time, and also the effect of the hundreds of thousands of supporting poles which will be within this fenced area.

We seem to rely very heavily on models rather than what happens on the ground nearby. Modelling is only good until something unexpected happens. The modelling for Chernobyl and Fukashima was only found to be wrong after cataclysmic events. I do not get

the impression that Pitt&Sherry/ Photon have put much effort into thinking about the unexpected.

A further issue I have is that the report discusses Protection of Public Assets, but does not cover protection of Private assets. The house sites in the vicinity of the proposed solar farm have been chosen very carefully with historic floods in mind. Even the new house on Myalla has been put up in the air to miss a flood and had a large levee built to protect other assets. All these decisions were made with nothing built in this floodway.

There are also buildings , fences, crops and livestock at risk.

Mr Chairman , I have a question for you .... who is going to be responsible for the private assets of neighbours if this project goes ahead in its current form and there is massive damage to our assets in a major flood event? Is it the NSW Govt, Gunnedah Solar Farm P/L or the owners of Myalla? Our very real concern is that no-one will be protecting us at all.

The solar farm should not be there, but if the state needs it so badly then it should have a guaranteed zero impact – and if not then those who are impacted should be entitled to compensation. Photon should have walked away from this project when they realised it was across a major discharge floodway from the Namoi River.

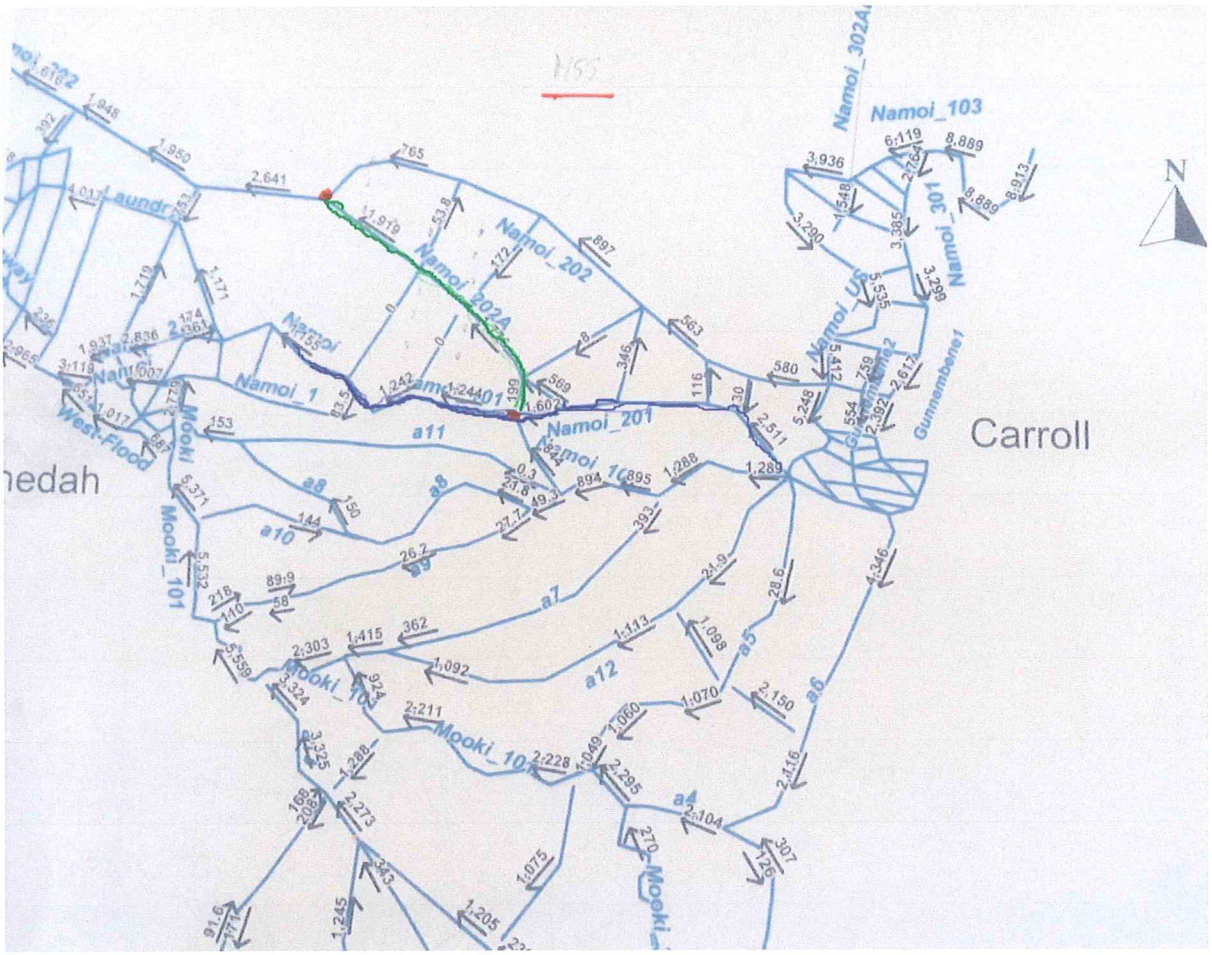
Everyone I speak to who has first hand knowledge and expertise in local floods cannot believe this project might go ahead. Mr Chairman, my request to this Commission is to reject this proposal. There are plenty of places in NSW to put many solar farms rather than in a major floodway from the Namoi River. The risks are far greater than the benefits.

Mr Chairman I also want to let you know how difficult this whole process has been for the people potentially impacted by this project.

We are all busy people , some challenged by technology and being able to understand the huge amount of material being thrown at us. Can I suggest that proponents of such State significant projects in future be required to have sums of money available for community groups to employ their own consultants to ground truth these submissions and help everyone through the process.

The Department of Planning said that the Solar Farm is "approvable" (p30). This is not a sound recommendation. To me this also means that it is open to rejection. When we met with the Department of Planning they said they had never before been asked to assess, let alone approve a solar farm in a floodway. I beg the Commission to reject it.

I would like to thank you for the opportunity to be heard in this forum.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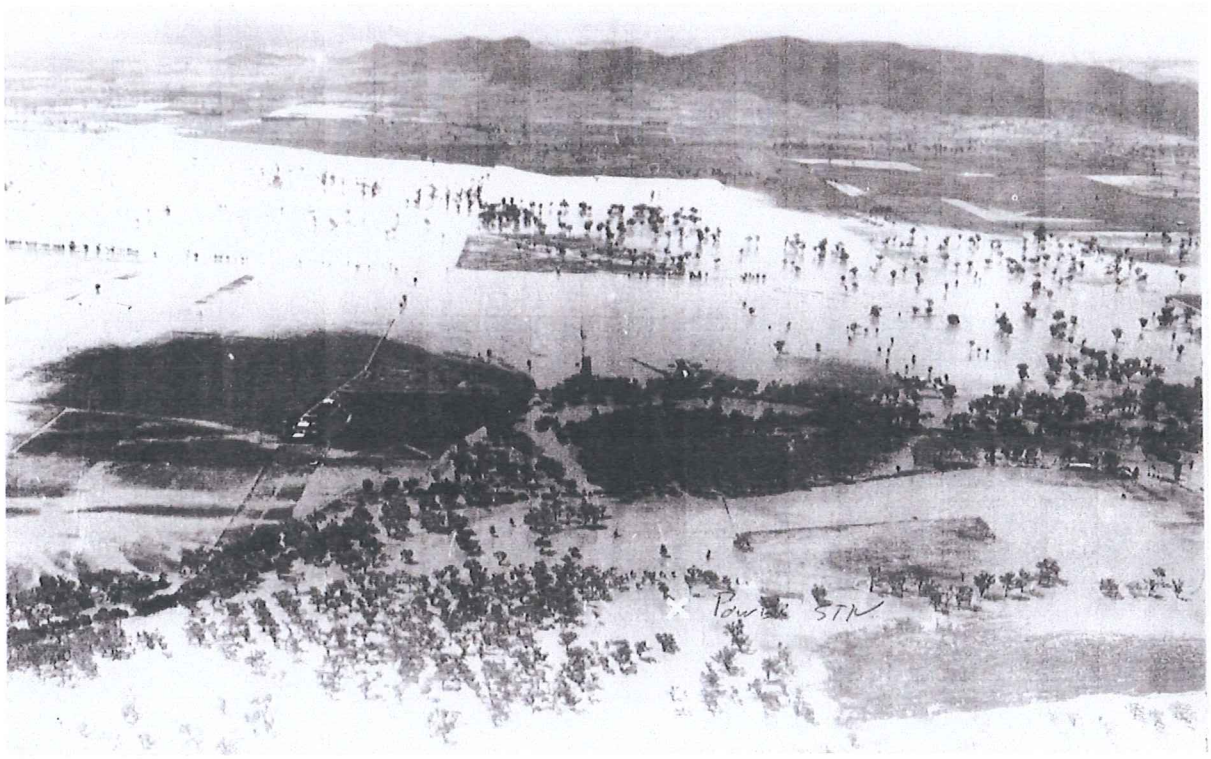
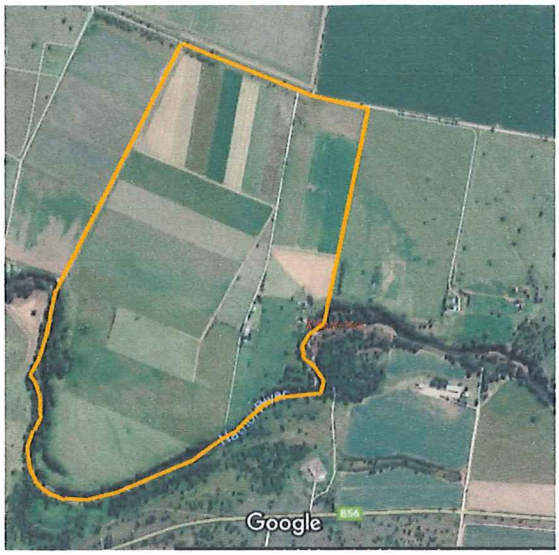


Phil Glover

Inundation of "Weetaliba" in relation to which garden step was at top flood level at the time.
Steps approximately 10cm.



Farm Map—no flood

Farm Map—Flood step 1

Farm Map—Flood step 2

Farm Map– Flood step 3

Only a few centimetres makes a huge difference

Disclaimer: This map is accurate with our memories of floods we have seen on our own property (outlined in orange on the first map), since the steps were built. However during floods it is difficult to move around, so the representation of areas of land owned by neighbours is in most instances a guess—although may represent what we have seen as floods receded.

30th November 2018