### **Gunnedah Solar Farm Submission**

I object to the Solar Farm being built by Photon energy in Gunnedah

## 1. FLOODING

I don't think anyone that I have met from Photon or Pitt and Sherry have any real understanding on what a flood is and what the consequences of their actions in a floodway are.

The poor quality of the study on flooding in the EIS makes me wonder whether they are naive and incompetent or trying to be very deceptive.

Photon are reckless and irresponsible wanting to put a solar farm in a flood way when there are large areas of flood free land in the Gunnedah Shire.

My family and many close neighbours are very distressed by the prospect of this development going ahead in a major discharge from the Namoi River in a flood event.

I am happy to show anyone from the Department of Planning or other organisations the key concerns of local residents.

Below are some of the key points:

- a. The Main problem with the Solar Farm is that a **1.8m high chain wire fence some 10 km** long will be erected around the farm. Because it is in a floodway, flood debris will accumulate in the chain mesh and cause an impenetrable barrier, acting as a levee to the height of the flood water which will both push water in different directions and make water levels much higher than normal outside of the fence endangering our property, livestock, homes and potentially isolating us from town for longer periods.
- b. I believe that in other places around the world there are solar farms being built without fences and other technology is being utilised for security. Photon should consider this.
  Even if there was no fence the support structures of the solar farm would collect much flood debris which could still change height and direction of flow.
- c. The discharge point from the Namoi at Galton's (opposite the solar farm ) is Huge. Both in
  - i. **Output** eg In the 1955 flood 1710m<sup>3</sup>/sec. was maximum output.
  - ii. **Speed**. Photon states in the EIS it does not get any higher than 2.1 m/sec based on the 1984 filood, It was 4.7 m/sec in 1955.
- d. I and other landholders near the Photon site have been approached by a number of other companies wanting to put a solar farm on our lands. They have all walked away when they heard about the flooding. Photon should now walk, or be made to walk by the NSW Government.

#### e. The Photon Flood Study is wrong.

- i. States +/- 8.9 m accuracy as data got from a satellite
- ii. Based on one of the four 1984 floods, none of which were great.
- iii. Should have used the 1955 flood.... which is the benchmark 1 in 100 year flood.
- iv. Not home truthed with ground survey

- v. No discussion with neighbours etc for reference points
- vi. Does not agree with what locals know about depths of water at various places.
- vii. At some stage through the EIS, the experts even question their own flood study !

## f. The Carroll to Boggabri Flood Management Plan of 2006 was not even considered

- i. The 2006 study is truthful and accurate and covers a number of floods.
- ii. This study suggests that houses and important small assets such as sheds can be protected by levees without affecting other assets in the community
- iii. This study was ground proofed by landholders and surveyors
- g. **Woods' and Groves' houses** have had a height of 500mm above major flood height set as the height of the floor of their houses by Gunnedah Shire Council. Both these houses are to the east of the proposed solar farm
  - i. Groves' house is 1.9 m in the air .... This must mean that the water could get to 1.4 metres deep in that vicinity
  - ii. In a flood event Woods' house is totally surrounded by water and they cannot leave it

# h. No flood is predictable .. every flood is different

- i. **Timing of various steams** peaking can affect each flood level in Gunnedah. They are:
  - a. Cox's Creek
  - b. Mooki River
  - c. Peel River
  - d. Namoi River
- ii. Effect of Vegetation: ie No pasture vs high grass
- iii. Effect of rubbish in the water varies greatly with each flood!

## 2. NOISE

- a. The EIS looks like it is just giving lip service to noise .... It is very hard to read and understand ....unless you are trained as a Sound engineer!
- b. As far as I am aware there has been no ground truthing or testing at the various residences
- c. We are extremely concerned with the noise that will be generated by TEN pile drivers for 60 hours per week for up to twelve months will be horrendous for anyone living within a Two Plus km of the site. I am very concerned about this as my wife I work from home.
- d. As an alternate option we **request that if the post holes be drilled and filled with concrete** rather than being hit in by pile drivers.
- e. There was also no discussion on the noise made from the inverters!

## 3. 50 Road Trains per Day !

a. What will happen during rainy periods when trucks cannot enter the site ..... where will Photon park 50 B Doubles a day?

Phillip Glover

Gunnedah NSW 2380