Sirs,

Please find attached my concerns relating to the proposed solar power station at Graveney.

Graham Setterfield
Technical progress is necessary, climate change is upon us and our energy policies have to change. I was an expert member of The Institution of Civil Engineers “State of the Nation” reports into infrastructure during the early 2000’s which strongly urged Government to take action over the lack of strategic policy regarding power supplies. I am an advocate of solar energy and as a Fellow of both The Institution of Civil Engineers and The Institution of Water and Environmental Management I am passionate about the environment and am very proud of my engineering reputation. I would not add my name to any protest unless absolutely certain in my mind about the correctness of my arguments. I wish to make the following 2 points to the inquiry:

**Scale and location.** The use of this totally rural greenfield site, important for bird life, for walking and leisure and for the overall balance of the environment in North Kent is wholly inappropriate for an industrial development on this scale. The scale of the development is beyond the comprehension of many local people. That is not meant to sound arrogant simply because I have first-hand witnessed and worked on large scale projects, but the size of the individual panels and the number and scale of the batteries and buildings on the site will change the landscape for ever. The panels will be larger in aspect than many houses and there is planned to be many thousands of them. The total area proposed is larger than the area of the nearby market town of Faversham, which is a planning proposal that would normally be rejected instantly, but in this case is not being considered locally but nationally with the inherent risks of limited local knowledge. It could be argued that the scale of the development has been increased in scale in order to avoid the local decision making process.

**Risks associated with the lithium batteries and water.** Others are far more expert than me to talk about how the proposed scale of the battery configuration is significantly beyond anything ever attempted anywhere in the world. I am however, technically expert in matters relating to flood defence and the construction and maintenance of sea walls. To say that defences will be constructed to ensure protection is to misunderstand flood protection. Nature invariably generates an event beyond the return period design parameters. To reduce this risk will require flood protection not only along the frontage of the site but also at the end and rear of the site wherever there is lower ground, to prevent the flood protection being outflanked. These defences will then provide an ideal fluvial flood retention possibility. Technically this can be solved, but at what cost and at what risk of the lithium batteries and flood water coming into contact. The former, now
brown field, sites of the North Kent power stations are already built on vulnerable sites, and extreme event flood defences have already been built to high standards beyond those considered for Graveney. It was not by coincidence that this area has already been considered for managed realignment and possible return to saltmarshes.

Yours faithfully

Graham Setterfield