

Response to

Technical note on replacement works Document Reference: EN010141/DR/8.36

Dear Mr Sword

I would like to contest the applicants claims to attempt to minimise the works at 20 yrs to remove 695,760 solar panels and install new ones in their place as 'maintenance'.

I hope you will consider the points raised and ask the applicant for a more detailed clarification and examples to back up what they state can be achieved.

Yours sincerely

Shaun Woodward - Resident

Response to 2.3.12

The applicant states that a team of five workers can replace 420 panels per day at the 20 year point of the scheme.

Five people in a team or, or multiples of five are identified with roles as:-

- a. Three to unbolt, and fix the new panels,
- b. One to manages pallets and telehandler
- c. Fifth team member to reconnect and replace any damaged cabling and check connection.

I contest this is not possible in practice and wildly optimistic on the following grounds:

- 420 panels assuming a 7.5 hours day is about 1 panel replacement per minute.
- The team of five is not simply handling 420 panels. They are also loading, transporting and delivering those panels from the site D storage warehouse, then lifting from the delivery vehicle after transporting to the required area of the scheme (which could be up to 6 miles away). They will be installing the 420 replacements whilst carefully disconnecting, unbolting, and removing 420 old panels, so are physically handling 840 panels during the replacement process not 420. This is irrespective of whether they remove all the panels first then fit new or exchange simultaneously.
- After 20 years the new panels are unlikely to be of the same manufacturer or exact style, perhaps even the same size. They may not have the same electrical connections. It may not be so simple to exchange old for new, but I doubt the mounting frames will need replacement or modification, but the applicant can't know for sure at this point? How can they know? The applicant says they don't know the design or supplier for future new panels so any claims of replacement and any credible rate of installation cannot be verified or tested.
- The new panels will be cling wrapped or banded on pallets which will require removal as they are installed and will also generate considerable waste packaging which will require handling. If it's windy this will be especially important to avoid polythene wrapping being strewn across the site. It all takes time and people.

- After 20 years the fixings on the galvanized steel framework may well be corroded. Removing freshly installed bolts and fixings is not the same as removing 20 year old weathered and potentially corroded fixings. Even using angle grinders or other means to remove will take additional time, and new fixings will need to be procured, positioned and secured.
- The applicant states that removed panels will either be recycled or have a 'second life'. If so the removal of old panels from the support frames must be done with care, carefully restacking onto pallets and then onto trucks to return to the operational building in Site D. Pallets require time to stack, strap down, protect and wrap to avoid them falling off the trucks on the (up to) six miles journey back to the Site D depot building and beyond. More time needed for this work.
- I note the storage building stated in the DCO is being now used for storing so many things. Vehicles, panels, planting, fencing, transformers, string inverters cabling etc. It must have elastic walls! ...or the panels to be delivered 'just in time'... very convenient but unlikely. For example, are 20% of the Chinese panels (140,000 panels to be delivered from the Felixstowe docks on 234 articulated lorries... just in time? I doubt it. Maybe 70,000 panels on 117 artics, or maybe 35,000 panels on 59 artics... I don't think even this quantity would fit into the storage building... 59 containers is a large volume... To break down 'just in time' deliveries to even smaller quantities than this may be possible but breaking downloads into ever smaller quantities delivered over long timeframes from China risks non delivery, late delivery, insolvency of manufacturer, change of product spec or potential price hikes. I think this developer will buy and store in bulk elsewhere before bringing into the site 'just in time', which will add more carbon footprint and more traffic movements form Felixstowe to storage facility and storage to site.
- If the applicants information is incorrect, this will impact on carbon and GHG calculations, traffic movements, and the number of workers on site, and commuting relative to what is stated.