Open Floor Hearing Submission by Rebecca Walker on behalf of myself, Craig Walker and Tania Russell.

I would like to speak and raise what we consider relevant points about the following subjects:

1. Consultation with United Kingdom Health Security Agency (UKHSA)
2. Outline Battery Safety Management Plan [APP-183]
3. Power Conversion Station units
4. Water Framework Directive

**Consultation with United Kingdom Health Security Agency (UKHSA)**

As stated in the Planning Act 2008, Section 42, there is a requirement to consult with prescribed consultees with one of these consultees being the UKHSA. We note the UKHSA were consulted with by the Applicant, but we have been unable to find any documentation which the UKHSA have submitted and have only found the summary which has been done by the Applicant as detailed in [APP-045] and [APP-161], where the UKHSA has concerns associated with EMF. We also note the Examining Authority has asked the Applicant about consultation with the UKHSA in [PD-010].

At the end of August this year the UKHSA were asked to provide further comment on the Battery Energy Storage System and associated infrastructure planning application at Navenby, LN5 0AY. This additional consultation with the UKHSA was due to local community objections based on health concerns.

Whilst we appreciate the Navenby BESS is a Town and Country Planning scheme for approval, even though it will be associated with a large NSIP solar scheme, we feel the points raised by the UKHSA are very important and will be more than relevant to the One Earth Scheme.

Given the number of repeated concerns raised by the local communities of North and South Clifton. We therefore respectfully ask the Examining Authority to request for a further response from the UKHSA specifically about Air Quality Assessment, the Long term public health Risk with the decommissioning, Noise, Cumulative Effects, Fire Safety and Contamination Risk to land and groundwater, especially as the BESS is planned to be constructed and operated on a Protected Drinking Water site and sits adjacent to a reservoir and water treatment plant and the PCS units are being placed directly in Flood Zones 2 and 3.

**Outline Battery Safety Management Plan [APP-183]**

Whilst reviewing documents for information relating to the UKHSA. We note in [APP-183] it discusses the potential for Unplanned Emissions. On Page 60 under C.4.4.1 Results and Conclusions it states and I quote "as illustrated in Figure C.2, at the eastern BESS site, in all emission rate scenarios there are no sensitive receptors located within the area where the assessment level may be exceeded in 90% of meteorological conditions. Thus, it can be concluded that a fire at the eastern BESS site would not result in any significant adverse health effects."

We would respectfully question if this statement is accurate. Looking on Page 61, Figure C.2: which shows a plan with the Impacts from Unplanned Emissions at Eastern BESS Compound, it is clear from the picture there are sensitive receptors within the marked areas, these being Northfield Farm Poultry Houses, Northfield Farm Bungalow and Anglian Water, Water Treatment Plant.

We also note the modelling was done on 3 and 6 hours of fire, which we assume has been undertaken following the required guidance, but when we know there are many cases of BESS fires where they burn for a lot longer, the modelling appears to be rather limited and likely best-case scenario. Surely something as critical as the spread of unplanned emissions is something that should be based on worst case scenarios.

We would also point out for accuracy there is an error in [APP-183] with the labelling of Figure C.3 on Page 62 as it states it is the Eastern BESS compound, but we believe it is actually showing the Western BESS compound.

**Power Conversion Station units**

We have serious concerns about the combined risks of noise, flooding, and contamination within a protected drinking-water area. The Applicant proposes PCS units up to six metres high, yet this height appears barely discussed in terms of mitigation. Managing noise at that scale will be extremely difficult in a landscape that is flat, open, and often windy, where sound carries easily. Visually, the problem is even greater. The Applicant's landscape and visual mitigation planting of mainly new native hedgerows, is only expected to reach about three to four metres in height, and that could take ten to fifteen years to establish.
So, the six-metre high PCS units in the flood-zone areas on the East of the site, will likely remain exposed for years, if not permanently, harming the visual amenity of the whole area.
The Applicant has said PCS units will likely be located alongside access tracks, but those tracks sit close to residential properties on the eastern side of the scheme. That raises another question, what happens once these are installed and the mitigation

fails?
Can the noise and visual impacts ever truly be reduced for residents, for people using public rights of way, or for drivers on public roads?
According to the design layout, there will be ninety-two PCS units, sixteen in Flood Zone 2 and seventy-six in Flood Zone 3. All within a drinking-water catchment area. Both the solar panels and the PCS units contain toxic materials such as lead, mercury, cadmium and PVC wiring. In flood conditions, these substances could leach into the soil or flow into the River Trent, contaminating an important water supply.

There is also the fire risk. PCS units are known to overheat and ignite, particularly in hot conditions or with inadequate maintenance. Once burning, they can release hazardous chemicals and continue drawing power from the wider system, effectively feeding the fire. In a flood zone that creates a dangerous scenario of toxic firewater spreading across the floodplain and contaminating the water supply. We have not been able to find any clear assessment of this within the Applicants documentation. PCS units are mentioned briefly in the Outline Battery Safety Management Plan [APP-183], but only in connection with the BESS compounds and not the numerous PCS units which will be located within the solar-array areas.

If the Applicant can point to the document where this risk is properly addressed, that would help us understand how they intend to manage it?

The site itself lies on the Mercia Mudstone Group, a geology known to chemically attack concrete. Over decades, this could degrade the two-metre-deep plinths supporting the PCS units, releasing contaminants directly into the ground, again, within a protected drinking-water zone.

And finally, the combination of these plinths and the proposed perimeter fencing may alter natural floodwater flows, potentially worsening local flooding and dispersing contaminants even more widely.

We do not believe the Applicant’s mitigation claims in relation to PCS units, match the physical reality of this site. The risks to water quality, flood safety, noise pollution, local amenity, and visual impact remain substantial. Much stronger, evidence-based safeguards are needed before this project can be considered acceptable and should not be left until the detailed design stage.

**Water Framework Directive**

In [PD-010] *Q12.0.6* the Examining Authority highlighted the statement from paragraph 5.16.14 of NPS EN-1, "The Secretary of State must refuse development consent where a project is likely to cause deterioration of a water body or its failure to achieve good status or good potential, unless the requirements set out in Regulation 19 are met."

Whilst the Applicant has provided document [REP4-018] 6.21.2 Appendix 7.4 Stage 1 Water Framework Directive Screening Assessment (Clean) (Rev 3) and states there will be no deterioration of a water body or failure to achieve good status or good potential, we would respectfully disagree. It is not possible to mitigate all the risks to meet this statement.

The Planning Inspectorate's own NPS guidance explicitly requires *sufficient certainty* that no deterioration will occur and not a "risk-managed" approach or deferred mitigation.

The One Earth Solar project puts a large amount of electrical and battery equipment inside active flood zones and within a drinking-water protected area that feeds into the River Trent. If those areas flood, contaminated water and fire-suppression runoff could reach the river and groundwater, which is exactly what the Water Framework Directive is designed to prevent.

Regulation 19 only allows an exception if stopping that damage would be impossible or disproportionately costly, and if the benefits clearly outweigh the harm. Here, that isn't the case. The developer could easily avoid these risks choosing an alternative safer site, however, this was not done as it was easier to choose a site with willing land owners despite it being in Flood Zones 2 and 3 and on a protected drinking water site.

Because those legal tests aren't met, the Secretary of State is required by law to refuse consent under paragraph 5.16.14 of NPS EN-1. The risk to our drinking-water environment is too high and cannot be justified when there are alternative sites available that could provide the same, but without the risk.