PHILIP HEARD: INTERESTED PARTY REFERENCE No. 20054420

<u>COMMENTS SUBMITTED FOR THE PROPOSED SPRINGWELL DEVELOPMENT DEADLINE 5</u>

- 1.0 Issues Not Addressed in Response to Deadline 3 Submissions [EN010149/APP/8.25 dated September 2025] (REP4-048)
- 1.1 Some of my Deadline 3 Submissions (REP3-104) including concerns regarding Landscape and Visual Impact, Agricultural land, BESS Safety, Waste and Climate have not been considered under the Applicant's responses to Category 3 Stakeholders. I have summarised the unanswered issues below:

GHG Emissions:

Further to REP3-104 Para 12.1, the UK Government's 2030 target (Clean Power Action Plan) states "...... the 2030 power system will see clean sources produce as much power as Great Britain consumes in total over the whole year, and at least 95% of Great Britain's generation; reducing the carbon intensity of our generation from 171gCO₂e/KWh [grams of carbon dioxide equivalent per kilowatt hour] in 2023 to well below 50gCO₂e/KWh in 2030". Response to Deadline 1 Submissions Appendix 2 (REP2-023), Table 2 quotes the lifetime intensity of the Proposed Development at 84.1 gCO₂e/kWh. Therefore for it's entire life, the Proposed Development will be producing 34.1 gCO₂e/kWh above the Government's 2030 target requiring other much cleaner renewables such as wind and nuclear to redress the balance. Can the Applicant please explain how the Proposed Development can contribute towards the Government's target?

BESS Safety:

Can we please have sight of the calculation that results in a 1 in 7700 years probability of a cell venting event and, given this figure, how does the Applicant explain the hundred or so BESS fires/thermal runaway events worldwide to date? (REP3-104 para 4.4). In the absence of this calculation, the Applicant may wish to comment on Tyler Parkes (Planning Consultants) letter to Redditch Borough Council (Planning Application 25/00628/FUL) dated 9 July 2025. Appendix D to the letter shows a method to provide a comparative benchmark for assessing the relative safety of energy storage deployment over time and helps quantify the likelihood of future incidents as capacity scales up, based upon a Fire Incidence per MW-Year calculation. Details are:

Cumulative Total of UK BESS Fires: 4 recorded incidents 2020-2025

Current Operational Capacity: 2,600 MW

Average Operational Period Considered: 3 years (approximate window over which fires

occurred)

Total Exposure: 2,600 MW x 3 years = 7,800 MW-years

This results in an incident rate of:

4 fires / 7,800 MW-years = 0.000513 fires per MW-year, or approximately 1 fire per 1,950 MW-years

Projecting Future Risk:

The UK Government's stated 2030 Clean Power Action Plan BESS delivery targets are:

Target Capacity by 2030: 27,000 MW

Target Capacity by 2035: 29,000 MW

Assuming a consistent average operational period:

2030 projection: 27,000 MW x 1 year = 27,000 MW-years

2035 cumulative (5-year extension): 29,000 MW x 5 years = 145,000 MW-years

Using the observed rate:

By 2030: 27,000 x $0.000513 = ^{13.85}$ fires

Cumulative by 2035: 145,000 x $0.000513 = ^74.4$ additional fires

This equates to a **cumulative total of nearly 90 BESS fires in the UK by 2035**; given the lack of UK legislation, the reducing safety measures such as BESS container spacing and, in the case of the Proposed Development, no preparation for worst case propagation of fire (see below), there is nothing to suggest the incident rate will reduce. While this extrapolation is based on limited data, it illustrates a crucial trend: as BESS capacity increases, so too does the absolute number of potential incidents—even if relative risk remains constant.

In Response to Deadline 1 Submissions (REP2-023) P135 Table 5-2, regarding Carlton Le Moorland Parish Council's concern about BESS safety, the Applicant states: "in the very low likelihood of a thermal runaway event, due to the mitigation measures, thermal runaway will not propagate from one container to the next." This is a bold statement. ZERO risk of propagation and the Applicant has not even selected the battery type nor finalised the design including BESS spacing. What are the 'mitigation measures' proposed and where are the calculations that result in zero risk of propagation from one container to the next?

Further to REP3-104 Para 4.8, the Fosse Green proposed solar development, at a much earlier stage in the planning process, gives details regarding water storage on-site for fire fighting purposes, attenuation basin capacity and measures to prevent contamination of the watercourse. Indeed, Fosse Green have options of either a centralised BESS or distributed BESS across the site and have provide details for both. Helios Renewable Energy Project likewise provide good detail upon which to consider safety and potential contamination concerns. Why, therefore, cannot the Springwell Applicant provide similar detail?

Environmental Statement Appendix 1.1 Statement of Competence (APP-073) lists EIA Technical Disciplines alongside qualifications and experience of un-named individuals. A glaring omission is nobody listed with technical qualifications/experience in the discipline of BESS design and safety. What are the technical qualifications and corroborated experience of the Applicant's BESS safety consultant(s)?

Solar PV Panels:

Further to REP3-104, Para 11.5, the US Environmental Protection Agency in May 2025 stated that typically solar PV panels will last 25 years or more; if it was anything close to 40 years they would not state 25. Can the Applicant please give some examples of manufacturers that are giving a 40 year guaranteed solar PV panel life. This is important given that the Applicant "strongly opposes the imposition" of the ExA's suggested change to the draft DCO (REP4-050) limiting the number of replacement solar PV panels across the lifetime of the Proposed Development to 5%. The Applicant comments "For example, there's no suggestion or evidence that if 5.5% or 7% panels were replaced".

Previously, the Applicant has been adamant that 5% would be more than enough to cover any contingency. If that thinking has changed, why not suggest, say, a figure of 7.5% is included in the DCO and amend the climate calculation according? If a form of the ExA's wording is not included, the Applicant could replace most of the panels under the term 'maintenance', thereby achieving majority panel replacement without having included the GHG emissions in the upfront estimated lifetime carbon intensity calculation. For the other suggested changes to the draft DCO by the ExA that the Applicant 'strongly opposes', the Applicant has still provided a draft requirement without prejudice; why not in this instance?

The following paragraphs are my comments on the Applicant's Response to Deadline 3 Submissions [EN010149/APP/8.25 dated September 2025] (REP4-048)

2.0 Decommissioning:

- 2.1 Regarding Decommissioning (Table 4-2, Page 27 Response to Deadline 3 Submissions (REP4-048)) and Q2.15.1 (REP4-049), the Applicant states that the Funding Statement has been updated to include decommissioning. In the November 2024 (APP-016) and June 2025 (REP1-010) versions of the Funding Statement the wording of the relevant paragraphs is:
 - "2.2.2 This estimate has been arrived at by including construction costs, preparation costs, supervision costs, land acquisition costs (including compensation payable in respect of any compulsory acquisition), equipment purchase, installation, commissioning and power export.
 - 2.2.3 The estimate also includes an allowance for inflation and project contingencies."
- 2.2 This wording is very comprehensive. It is surprising that the Applicant previously failed to include decommissioning which cannot be classified as a contingency. The Applicant has not given an estimated figure for decommissioning but it is assumed it will not be insignificant (£100M+ in 40 years time?). Therefore, how can the Applicant slip 'decommissioning' into the Funding Statement (paragraphs 2.2.2 and 2.2.3 of the September 2025 version (REP4-006)) with no increase in the current cost estimate of the Proposed Development of £650m £750m?

3.0 Statement of Need:

In response to Scopwick & Kirkby Parish Council (Table 3-1, Page 11 Response to Deadline 3 Submissions REP4-048) the Applicant states "The Statement of Need highlights that the equivalent of one large solar scheme must be delivered every month between 2024 and 2030 to achieve this." This is a reference to a document that the Applicant has written. Where is the evidence to support this, or is this just the Applicant's opinion? What is the definition of 'large'? Offshore wind, tidal and nuclear can deliver far more efficient energy with far less environmental impact. A nuclear Small Modular Reactor (SMR), for example, will sit on 2ha of land and power one million homes (The Times 22 Aug 2025) compared to 180,000 homes for the Proposed Development. A similar comparison can be made regarding cost of power: at approximately £2Bn to power one million homes, an SMR will power 100,000 homes for circa £200M; even at the lower end of the Applicant's projected cost of £650M, the proposed development will power 100,000 homes for circa £360M – 1.8 times higher cost than an SMR.

4.0 Agricultural Land:

- 4.1 Table 3-1, Page 11 Response to Deadline 3 Submissions (REP4-048) states, "The Applicant recognise the importance of protecting agricultural land." If this was a genuine statement, the Applicant would confine it's Proposed Development to the non-BMV land within the Order Limits. Indeed, the Applicant refers to the urgent need as stated in NPS EN1 & NPS EN3, but does not mention the words in NPS EN3 (Para 2.10.11) "The Powering Up Britain: Energy Security Plan states that government seeks large scale ground-mounted solar deployment across the UK, looking for development mainly on brownfield, industrial and low and medium grade agricultural land." If BMV land were to be excluded from any development, Springwell would still be one of the largest solar farms in the country. I have raised this on a number of occasions (eg REP3-104); I assume the Applicant's failure to clearly explain why this Proposed Development cannot proceed on non-BMV land is that there is no explanation other than maximising profit.
- 4.2 In Paragraph 8.8.22 of the Planning Statement (EN010149/APP/7.2) (APP-0136), the Applicant states "Out of the 1280ha of land within the Order Limits, 231.7ha is BMV which is proposed to be utilised for hard infrastructure i.e. collector compounds, Springwell Substation, Solar PV development, and BESS." This statement does not justify use of the BMV land: without the solar PV panels on BMV land the Proposed Development would still produce over 650MW; Springwell substation and the BESS do not need to be close to the proposed Navenby substation, they can be on the closest non-BMV land within the Order Limits. Indeed, the argument that the Springwell substation and BESS do not need to be close to the proposed Navenby substation is supported by the proposed Fosse Green Substation and BESS which will be some 10km from the connection point at the proposed Navenby substation.
- 4.3 Chapter 11 (APP-051) Para 11.5.29 states "The potential use of BMV land has been a key consideration in the development of design and several fields have been removed due them being classified as high grade BMV agricultural land." BMV land is graded 1, 2 and 3a but it is ALL Best and Most Versatile land; NPS EN3 refers to BMV, and low and medium grade agricultural land; it does not sub-divide BMV land. So, on what grounds has the Applicant decided that Grade 3a can be treated any differently to Grades 1 & 2?
- 4.4 Again, in response to Scopwick & Kirkby Parish Council, regarding visual impact (Table 3-1, Page 12 Response to Deadline 3 Submissions (REP4-048)), the Applicant states, "Chapter 10: Landscape and Visual..... reports that hedgerows in year 10, would be 3.5m in height and maintained by ongoing management." The definition of a report is 'a spoken or written account of something that one has observed, heard, done, or investigated.' So how can Chapter 10 report on something that has not yet happened? Indeed, there are a number of reported instances where Solar Farms are failing in the commitments they made prior to gaining planning approval, be it at a local or national level.

The following paragraphs are my comments on the Applicant's Response to Second Written Questions [EN010149/APP/8.26 dated September 2025] (REP4-049)

- 5.0 Temple Bruer Heritage Impact Review (Q2.7.5, REP4-049):
- 5.1 The Applicant states "Viewpoints B and C appear to have been taken from field entrances and are not representative of the overall character of the views from Warren

Lane". Viewpoints B and C are from Temple Road (as stated in the report) not Warren Lane; the hedges are sparse and low. Viewpoints B and C are both taken through gaps in the hedging and are not obvious field entrances; notwithstanding, Viewpoint B shows Temple Bruer above the hedge not through the gap. The Applicant continues, ".. Viewpoints D1-4 and E would have solar arrays behind the viewer when looking towards Temple Bruer."

Clearly nobody representing the Applicant has walked along Warren Lane; there are long sections of the field boundaries with no hedging so Temple Bruer Tower is visible along the Lane through many stretches of either no or low hedges. The Applicant points out that from Viewpoints D1-4, the solar arrays would be behind you as you view the Temple Bruer Tower. However, anyone walking along Warren Lane will be facing forwards, with the view of the Temple Bruer Tower to one side and the solar arrays to the other. Currently, on the opposite side of Warren Lane to the Tower are panoramic views across the Lincolnshire countryside; if the Proposed Development goes ahead these views will be replaced with visions of glass. The whole experience of the walk will change.

6.0 Permanent Sealing of Land (Q2.9.1, REP4-049):

- 6.1 In response to Q2.9.1, the Applicant disagrees with NKDC that any of the projects listed by the Council (ie Mallard Pass, Heckington Fen, Gate Burton and Cottam, Beacon Fen (at examination stage)) are expected to have any permanent sealing of agricultural land. Indeed, the Applicant has reviewed other NSIP solar farms and states this approach is consistent with all other projects with a time limited consent, including Mallard Pass, Heckington Fen, Gate Burton and Cottam. Regarding the Applicant's assertions I will cover each project in turn.
- **6.2 Mallard Pass:** A 60 year time limited consent. Table 12-4 of Chapter 12 of the ES, Land Use and Soils (APP-042), states that the areas of access tracks and solar stations on the site amounts to 8 ha. Paragraph 12.4.16 acknowledges that these areas will be treated as permanently sealed over. It was accepted in paragraph 12.4.20 that even though the oDEMP required the solar station and tracks to be restored to agricultural use at the end of the operational phase, "it is assumed that restoration may not be back to comparable quality, at least initially, following decommissioning". The onsite substation containing 6.4 ha (Table 12-5 refers) was also considered as permanently sealed over for the same reasons as the access tracks and solar stations. Of the 14.4ha of agricultural land affected by the substation, access tracks and solar stations, 4.2ha was BMV land (Table 1 of the ExA Recommendation Report refers). **Hence, Mallard Pass has permanent sealing.**
- **6.3 Heckington Fen:** A 40 year time limited consent. Paragraph 16.6.30 Chapter 16 Land Use and Agriculture (APP-069) states "only those areas of land proposed for the fixed equipment and substations, should be treated as sealed-over or irreversibly lost." The final Construction Management Plan suggested restoration to agricultural use post decommissioning, but the ES assumed that restoration may not be back to comparable quality. The ExA noted that of the 20.2ha of agricultural land proposed for the tracks, solar stations and substation, less than 3 ha would be BMV land. Paragraph 4.52 of the Secretary of State's decision letter acknowledges that the permanent loss of 2.8ha of BMV is a harm of the proposed development. **Hence, Heckington Fen has permanent sealing.**
- **6.4 Gate Burton:** A 60 year time limited consent. Paragraphs 12.8.8 of Chapter 12 Socio Economics and Land Use (REP4-010) stated that "the Solar Energy and Solar Park contains 73.6 ha of BMV and 6.8 ha of estimated BMV of which approximately 2 ha will be

permanently lost due to the construction of the substation". Paragraph 4.174 of the Secretary of State's decision letter states "The Secretary of State agrees with the ExA that 2 ha of BMV would be permanently lost and around 73ha would be out of arable use for 60 years." Hence, Gate Burton has permanent sealing.

- **6.5 Cottam:** A 60 year time limited consent. Paragraph 19.9.2 of Chapter 19 Soils and Agriculture (REP-010) states that the substation, power storage facilities and temporary tracks will cover 47.9 ha of which 4 ha will be BMV land occupied by temporary tracks. At paragraph 19.9.21 it was proposed that the hardstanding and access tracks would be removed on decommissioning. Paragraph 4.55 of the Secretary of State's decision letter stated "The Applicant argued that the cumulative agricultural land resource loss would be temporary with actual loss limited to the small extent of the switchgear housings and substations". Paragraph 4.74 of the decision letter says that the Secretary of State agrees that the proposed development would revert back to agricultural use once the operational time period had expired and that the effects would be temporary and reversible. However, given the distinction made between temporary and actual loss in paragraph 4.55, it is not clear whether the Secretary of State's conclusions in paragraph 4.74 are solely in the context of the majority of the site which would be covered by solar arrays which he was discussing in the previous paragraphs. **Hence, although not entirely clear, it is likely that Cottam has permanent sealing.**
- **6.6 Beacon Fen:** A 40 year time limited consent. Paragraph 14.7.3 Chapter 14 Soils and Agricultural Land (APP-065) says that the permanent land take is the footprint of the built development including the BESS, substation, transformer stations, construction compounds and the access tracks and roads, a total of 23.31 ha. A distinction is made between this permanent loss of land and the temporary nature of the loss of agricultural land for the solar arrays where the land can be returned to agriculture after decommissioning (paragraph 14.7.2 refers). Paragraph 1.4.9 of the Outline Decommissioning Plan (APP-078) confirms that all solar infrastructure will be removed on decommissioning. **Hence, Beacon Fen has permanent sealing.**
- 6.7 All of the 5 cases referred to were time limited consents and the intention of all, with the exception of Gate Burton (where the future of the substation was to be decided at the time of decommissioning), was to remove the infrastructure and revert the use of the land to agriculture on decommissioning. In all cases there appears to be a distinction between the loss of agricultural land during operation which is temporary and reversible on decommissioning and an acknowledgement that there would be a permanent loss of agricultural land for the areas of the substations, BESS etc. In Mallard Pass and Heckington Fen, the applicants acknowledged that even though their intention was to remove the infrastructure, there was doubt as to whether the soils under these areas could be returned to their former ALC quality and adopting a cautious approach, they considered that these areas were permanently lost. The Springwell Applicant is clearly not taking the same cautious approach; if that approach were to be taken it would result in the acknowledgement of a permanent loss of over 20 ha of BMV within the Proposed Development (Table 11-12 of Chapter 11 Land Soil and Groundwater (REP1-014) refers) which would trigger the IEMA thresholds.

7.0 Landscape & Visual Impact (Q2.10.1 – 4, REP4-049):

- 7.1 on a number of occasions the Applicant commences a sentence (Q2.10.1 Page 23) "The Applicant is of the opinion" It is worth pointing out that others are also entitled to an 'opinion'. Indeed, when it comes to landscape and visual, the County and District Councils are far better placed than the Applicant to assess the impact of the Proposed Development given their knowledge of the wider area and experience in determining planning applications in the region across a whole spectrum of disciplines.
- 7.2 The Applicant states that the only A road within the Proposed Development is the A15, running North to South. The Applicant appears to dismiss other roads "Sequential cumulative effects in LVIA are usually discussed in relation to recognised linear routes for example a specific A-road," Why just A-roads? Many people travel through Lincolnshire on an East-West alignment. Indeed, many from urban conurbations such as Nottingham and Derby take 'the scenic route' to the coast. It would not be inconceivable for someone to pass Fosse Green or Leoda Solar Farms, at least 2 or probably 3 of Coleby BESS, Navenby BESS, Gorse Hill BESS, Springwell BESS or Navenby substation, and then pass through the Springwell fields of glass. Many tourists stop in Scopwick to walk along the bubbling beck (presumably from where the 'Springwell' name derives) and take refreshment at the pub. Sadly, the scenic route will no longer be scenic.
- 7.3 Again in response to Q2.10.1, REP4-049, in travelling through the countryside the Applicant states there would "be a considerable break in the journey between views of the different schemes." From solar farm to BESS to BESS to substation to solar farm would see the longest break being about 15 minutes with other breaks significantly less; this cannot be described as a considerable break in the journey between views.
- 7.4 Response to Q2.10.2, REP4-049, states, "The Applicant considers that by year 10 when mitigation planting has achieved a height of 3m the effect would not be significant." Much 'mitigation planting' over recent years has suffered due to lack of rain. What guarantees are there that the mitigation planting will be regularly monitored and replacements planted where gaps appear, and what guarantees are there that 3 metre height will be achieved in 10 years?
- 7.5 Q2.10.4, REP4-049, concerning 'temporary hoarding' to prevent the effects of glint and glare pending the hedgerows reaching 3m, refers to the oLEMP Para 4.1.4: "A 700m section of the A15 at the south of Springwell West requires mitigation to reduce glint and glare impacts upon road users. This includes hedgerows to be infilled and maintained to a height of at least 3m. Until the advanced planting in this area has grown to sufficient density and height of 3m to mitigate impacts of glint and glare, temporary mitigation will be implemented to mitigate impacts. This temporary mitigation may include temporary screening or suitable alternative mitigation to be confirmed in the detailed LEMP. This would be removed once the hedgerows are of sufficient height. It is anticipated that a temporary barrier or suitable alternative would be required for approximately 3 years following the construction phase." On one hand the Applicant states mitigation planting will reach 3m in year 10 (Para 7.4 above) and then, for the temporary hoarding location, states 3m will be achieved in year 3. Indeed, Chapter 10: Landscape and Visual " reports that hedgerows in year 10, would be 3.5m in height..." Which is correct? The Applicant states that this temporary mitigation does not fall within the scope of requirement 9 (fences) of the DCO. The draft DCO states at Requirement 9:

"Fencing and other means of enclosure

9.—(1) No part of the authorised development may commence until details of all proposed temporary fences, walls or other means of enclosure, including those set out in the construction environmental management plan, for that part have been submitted to and approved by the relevant planning authority."

Is the Applicant saying that 'temporary hoarding' is not 'temporary fencing' or a means of enclosure? Indeed, in response to Q2.10.4 the Applicant states in respect of the temporary hoarding, "The olemp [EN10149/APP/7.9.3] requires that the colour and materials of temporary barriers to be designed to be sensitive" A barrier is a means of enclosure; therefore temporary hoarding should be included in Requirement 9.

7.6 Regarding Q2.10.5, (REP4-049) the Applicant states "The Windmill and Scopwick Mill would lie over 400m from the nearest visible infrastructure in Springwell Solar Farm. At this distance, notwithstanding the fact there would be a significant visual effect on views from upper windows of The Windmill, under no circumstances could the effects be considered to be so 'overbearing' or 'dominating' at the property that the resulting visual effect would be regarded to render the property an 'unpleasant' or 'unattractive' place to live." Quite frankly, these words are appalling. Having such a vast, sprawling industrial complex only 400m from a property which people have moved to for the quiet solitude of the countryside and panoramic views must be catastrophic for the residents. On what basis can the Applicant dismiss such concerns? To a vast number of local residents who have voiced their concern about this Proposed Development, the entire complex will render a large part of Lincolnshire unpleasant and unattractive.