

10 July 2026

East Park Energy: response to the Applicant's Technical Note on Replacement Works – assessment of key issues

Submission: Response to Applicant's Technical Note on Replacement Works/Responses to ExQ2

Stop East Park Energy (SEPE) is an independent, community-led group established in response to concerns over the proposed East Park Energy development. The group operates on an unfunded, voluntary basis and has over 1,000 registered supporters. SEPE includes individuals with professional expertise in agriculture, analysis, civil engineering, construction, ecology and environmental science, energy, finance, law and planning, as well as professional experience with the NSIP process.

• Submission contributions by a senior professional experienced in the DCO consenting regime and a Chartered Civil Engineer whose professional experience includes traffic associated with DCOs for highway schemes

This submission:

1. Contends that the Applicant has not demonstrated that the operational flexibility sought for replacement works would remain within the environmental envelope assessed by the Environmental Statement.
2. Examines whether the draft DCO contains sufficiently robust and enforceable controls to govern replacement activities throughout the operational life of the Scheme.
3. Challenges the evidential basis for key assumptions underpinning the Applicant's conclusions, including the proposed 20% notification threshold, replacement campaigns and associated environmental effects.
4. Considers whether the proposed notification process would provide meaningful regulatory control over major replacement campaigns, including the powers available to the relevant local planning authority.
5. Assesses the adequacy of the Applicant's consideration of the traffic, highway safety and soil quality effects arising from replacement works.

1. Introduction

This submission is in response to the Applicant's Technical Note on Replacement Works (REP3-075). It also addresses parts of the Examining Authority's Q2.1.2. The submission builds on the issues set out in SEPE's Deadline 3 submission (REP3-108), section 3.3.

The Technical Note confirms that significant replacement activities are anticipated throughout the proposed 40-year operational life of the Scheme, including replacement of solar panels, battery storage units, transformers, inverters and other principal electrical infrastructure. However, the Technical Note does not fully address the principal issue raised during the Examination: whether the operational flexibility now sought has been demonstrated to remain within the environmental envelope assessed by the Environmental Statement and secured through enforceable provisions of the draft Development Consent Order.

Throughout the Technical Note, the Applicant concludes that replacement activities would not give rise to materially different environmental effects. Nonetheless, many of those conclusions rely on assumptions regarding future operational practice and the future Operational Environmental Management Plan (OEMP), rather than demonstrating that the assumptions underpinning those conclusions are themselves secured through the draft DCO.

These broader issues are illustrated by more specific concerns arising from the practical implementation of replacement works, particularly in relation to traffic and transport, highway safety and the protection of soil quality during major replacement campaigns.

This submission is divided into two principal parts: a high level review of the Technical Note, focusing on whether the controls proposed by the Applicant are sufficiently robust to ensure that replacement activities undertaken over the 40-year operational life of the Scheme remain within the environmental effects assessed during this Examination; and a more detailed assessment of the key issues relating to traffic and transport and potential adverse impacts on soil quality and ground conditions.

2. Replacement works: operational flexibility not properly assessed or secured

2.1 The proposed 20% threshold appears arbitrary

The Applicant proposes that replacement of more than 20% of the Scheme's solar panels within any 12-month period should trigger notification to the relevant local planning authority as a "major replacement campaign".

The Technical Note describes this threshold as "a conservative marker", explaining that it reflects the potential scale of workforce, vehicle movements and waste generation associated with major replacement activities. However, no clear technical or environmental evidence appears to have been provided to demonstrate why 20% represents the appropriate planning threshold. Instead, it appears to derive principally from the Applicant's view that replacement of more than 20% of panels within a 12-month period is "unlikely" (paragraph 2.3.9).

The likelihood of a replacement scenario occurring is, however, a different question from its environmental significance. Planning controls should be informed by objectively assessed environmental effects rather than assumptions regarding the frequency with which particular operational circumstances arise.

This is particularly relevant because the Applicant identifies numerous potential drivers for replacement, including degradation, manufacturing defects, weather damage, electrical faults, technological advances, obsolescence and equipment compatibility. Despite recognising these possibilities, the Technical Note does not appear to provide a clear assessment demonstrating why the proposed 20% threshold, or repeated replacement campaigns over the 40-year operational life of the Scheme, would necessarily remain within the environmental envelope assessed by the Environmental Statement. Indeed, at paragraph 2.3.9, it acknowledges that notifications to LPAs would involve:

"...where necessary the adoption of additional management controls to ensure that such works do not give rise to any materially new or materially different environmental effects compared to those identified in the environmental statement"

SEPE sets out related concerns over LPA 'notification' and any corresponding powers in section 2.5.

According to paragraph 1.1.7, for the replacement of up to 20% of panels:

"prior notification would not be required"

The Technical Note does not address the potential for successive replacement campaigns structured to remain just below the proposed 20% threshold. Under the Applicant's proposed approach, a campaign involving up to 20% of the installed panels in any 12-month period would not require the campaign-specific approval process and the Technical Note does not explain what would prevent repeated campaigns immediately below that threshold being undertaken in successive years, or whether the cumulative environmental effects of repeatedly exercising that operational flexibility have been assessed. As a result, the proposed threshold could be avoided simply by dividing a larger replacement programme into a series of consecutive sub-threshold campaigns.

Similarly, the Technical Note does not appear to suggest an upper limit to a "major replacement campaign".

The Applicant repeatedly justifies its conclusions by stating that replacement activities would be materially smaller than the original construction programme. However, this compares a single replacement campaign with a one-off construction period. The operational flexibility sought is materially different. The proposed 20% threshold applies independently in each 12-month period throughout the 40-year operational life of the Scheme, meaning that successive major replacement campaigns could occur over many years. The Technical Note does not assess the cumulative environmental consequences of repeatedly exercising that flexibility, notwithstanding that local communities could experience recurring periods of traffic, noise, construction activity and associated disturbance extending well beyond the original construction programme.

The issue before the Examining Authority is not whether the Applicant's anticipated replacement programme would remain within the assessed environmental envelope. The issue is whether the full extent of the operational flexibility sought through the draft DCO has been demonstrated to remain within that envelope.

2.2 The scale of replacement works is understated

Throughout the Technical Note, the Applicant characterises replacement activities, including replacement campaigns, as "routine maintenance operations" (for example paragraph 2.2.3). Yet the information provided indicates that replacement campaigns could involve works of a substantially greater scale.

The Applicant confirms that approximately 695,760 solar panels are proposed across the Scheme and that a "major replacement campaign" could involve replacement of more than 20% of the installed panels within a single 12-month period.

The Applicant proposes that notifications for major replacement campaigns should address a wide range of matters, set out in paragraph 2.5.6:

“The notification would identify, insofar as relevant to the replacement activity proposed, the nature and scale of the works, the components to be replaced, the parts of the Site affected, the anticipated timing and duration of the works, the proposed phasing, working hours, workforce, plant and equipment, vehicle movements, HGV routing, access arrangements, temporary laydown or storage areas, welfare arrangements, waste management arrangements, and any measures required to manage effects on public rights of way, ecology, soils, drainage, noise, air quality, lighting, landscape and visual amenity, and local residents. The notification would also identify any pre- works surveys, environmental checks, stakeholder liaison, community communication, monitoring or reporting proposed for the relevant replacement activity.”

In SEPE’s submission, these are not the characteristics of routine maintenance but of a substantial engineering activity capable of generating environmental effects across a range of receptors.

At the lower limit of the “major replacement campaign”, 20% of the Scheme’s installed panels is approximately 140,000 panels. That would equate to an estimated 60–80MW capacity. By way of illustration, until recently the planning system recognised that construction of a solar generating station exceeding 50MW capacity warranted determination through the DCO regime. The proposed replacement of 140,000 panels – potentially at a minimum – within a single year illustrates the substantial scale of the operational flexibility now being sought.

The question for the Examining Authority is therefore not whether these works may genuinely be described as “maintenance”, but whether replacement activities of this scale have been adequately assessed and whether the assumptions underpinning that assessment are secured through enforceable provisions of the draft DCO.

2.3 Reliance on assumptions rather than secured controls

A recurring feature of the Technical Note is reliance on assumptions describing how the Applicant anticipates replacement activities will be undertaken, using expressions such as:

“unlikely”, “typically”, “reasonably expected” and “in the unlikely event”

The Technical Note does not demonstrate that these operational assumptions are secured through enforceable provisions of the draft DCO.

The Applicant places particular reliance on Requirement 9 of the draft DCO and the future OEMP as the mechanism by which replacement activities will be controlled. However, the Outline OEMP states that it will not include specific management measures for large scale replacement activities. Instead, those measures are deferred to a future notification process to be submitted prior to the commencement of the relevant works. Neither the draft DCO nor the Outline OEMP identifies the criteria against which that notification would be assessed, the circumstances in which additional mitigation could be required, or the basis on which the relevant local planning authority could require modifications or conclude that the proposed works fall outside the environmental envelope previously assessed.

The same operational flexibility extends beyond solar panels to other principal electrical infrastructure, including battery storage equipment, transformers and inverters, yet the draft DCO contains no equivalent mechanism demonstrating how replacement of those assets would be assessed should their replacement give rise to materially different environmental effects.

SEPE submits that the Applicant has not demonstrated that the assumptions underpinning its environmental conclusions are secured through enforceable provisions of the draft DCO. In the absence of such controls, it has not been demonstrated that the operational flexibility sought for replacement activities will remain within the environmental envelope assessed by the Environmental Statement throughout the 40-year operational life of the Scheme.

2.4 Technology change is acknowledged but not assessed

The Applicant recognises that replacement may occur not only because of equipment degradation, but also as a result of technological advancement, improved efficiency, obsolescence, manufacturing defects and compatibility requirements. It also acknowledges that replacement equipment may not necessarily be identical to that originally installed.

Nevertheless, the Technical Note appears to conclude that replacement activities would not give rise to materially different environmental effects, without demonstrating how future technologies have been shown to remain within the environmental envelope assessed by the Environmental Statement.

SEPE does not suggest that future technological development will necessarily result in greater environmental effects. However, where the Applicant expressly anticipates changes in equipment over a 40-year operational life, it has not explained how the Examining Authority can be satisfied that future replacement technologies will remain within the assumptions underpinning the environmental assessment, or what

mechanism would determine when replacement equipment falls outside those assumptions.

2.4.1 Examining Authority Q2.1.2

Notwithstanding the Applicant's acknowledgement that replacement equipment may not match original installations, SEPE further contends that, with reference to parts 1) and 2) of the Examining Authority's Q2.1.2, there is an apparent inconsistency in the Applicant's position.

Throughout the Examination, the Applicant has repeatedly stated that the detailed specification of key technologies has not yet been determined, including, for example, the precise type of solar panels and multiple aspects of the proposed BESS. The Applicant relies on that absence of detail in declining to provide more specific information. However, if the technologies to be installed during the construction stage have not yet been determined, it is unclear how it can also be concluded that future replacement works will necessarily involve the same or similar characteristics and engineering requirements as those originally installed – including, where relevant, dimensions, materials, products, foundations or other design specifications – or otherwise remain within the assumptions underpinning the environmental assessment.

2.5 Notification is not the same as planning approval

The Applicant relies on a “notification” process for major solar panel replacement campaigns.

SEPE is concerned about the parameters proposed by the Applicant. Paragraph 1.1.6 states:

“...the oOEMP includes a commitment that, where more than 20% of solar panels are to be replaced in any one calendar year (referred to as a major replacement campaign), a notification must be submitted to the LPA for approval, with details of the management measures proposed to be put in place for those replacement activities, to ensure that such works do not give rise to any materially new or materially different environmental effects compared to those identified in the environmental statement.”

Neither the Technical Note, the draft DCO nor the Outline OEMP explains what specific powers the relevant local planning authority would possess following receipt of such a notification, beyond broad references to “approval” (paragraphs 2.5.7, 2.5.9, 4.1.3). In particular, it remains unclear whether the authority could:

- require additional mitigation;
- require changes to the proposed replacement campaign;
- conclude that the proposed works fall outside the environmental envelope previously assessed; or
- prevent the works from proceeding pending further assessment.

This distinction is important. A requirement simply to notify the local planning authority does not, of itself, provide meaningful regulatory control or assurance that replacement activities have been independently reviewed against the assumptions relied on in the Environmental Statement.

If the Applicant relies on ‘notification’ as the principal safeguard for major replacement activities, SEPE submits that it should identify the statutory basis on which the relevant local planning authority could review, modify or refuse proposals that may give rise to materially different environmental effects.

SEPE submits it would be appropriate for a notification to be submitted to the LPA for approval irrespective of the percentage of solar panels to be replaced in any one calendar year to ensure the potential effects are understood, managed and approved.

2.6 Traffic conclusions rely on unsupported and unsecured assumptions

The Applicant concludes that traffic associated with major replacement campaigns would remain within the environmental effects previously assessed. That conclusion depends on assumptions regarding replacement productivity, workforce numbers, programme duration and the number of replacement crews, yet the Technical Note provides little evidence explaining how those assumptions have been derived or demonstrating that they are secured through the draft DCO.

This is significant because the Applicant relies on those assumptions when concluding that replacement traffic would remain below the levels assessed during construction. If replacement campaigns were undertaken differently, through lower productivity, additional crews or concurrent replacement activities, the resulting workforce numbers, HGV movements and duration of traffic impacts could differ from those described in the Technical Note.

SEPE also notes that, elsewhere during the Examination, the Applicant has repeatedly relied on an anticipated peak construction traffic level of 30 HGV arrivals and 30 HGV departures per day when responding to concerns regarding construction traffic. However, SEPE has been unable to identify any corresponding enforceable limit within either the draft DCO or the Outline Construction Traffic Management Plan.

If the Applicant considers that this HGV limit forms part of the basis on which the environmental assessment has been undertaken, SEPE submits that it should be secured through the DCO rather than relied on as an operational expectation.

2.7 Conclusion

SEPE does not dispute that replacement of equipment will be necessary during the operational life of the Scheme, nor does it suggest that replacement activities will necessarily give rise to materially greater environmental effects than those previously assessed.

The issue is whether the Applicant has demonstrated that conclusion through evidence and enforceable controls contained within the draft DCO.

Throughout the Technical Note, the Applicant concludes that replacement activities would remain within the environmental envelope because an individual replacement campaign would be smaller than the original construction programme. That comparison does not address the cumulative environmental implications of the operational flexibility actually sought under the draft DCO, which would permit successive replacement campaigns throughout the 40-year operational life of the Scheme.

SEPE contends that the Technical Note relies on assumptions regarding future operational practice, future technology, replacement programmes and future management plans rather than demonstrating that those assumptions are secured through enforceable provisions of the draft DCO. Nor does it demonstrate how the proposed OEMP or 'notification' process would provide meaningful regulatory control over future replacement activities.

SEPE therefore submits that the Applicant has not demonstrated that the operational flexibility sought for replacement activities will necessarily remain within the environmental envelope assessed by the Environmental Statement throughout the lifetime of the development.

The Examining Authority may therefore wish to seek further clarification regarding:

- the evidential basis for the proposed 20% notification threshold, the apparent absence of any upper limit on replacement activity, and the cumulative effects of any successive sub-threshold replacement campaigns;
- how the cumulative environmental implications of successive replacement campaigns permitted under the draft DCO have been assessed;

- which assumptions underpinning the Technical Note are secured through enforceable provisions of the draft DCO;
- what powers the relevant local planning authority would possess under the proposed notification process to require additional mitigation, modify replacement proposals or determine that works fall outside the assessed environmental envelope; and
- whether additional operational controls, including enforceable limits on replacement traffic, are necessary to ensure that future replacement activities remain within the environmental effects assessed during this Examination.

3. Traffic and transport issues and effects during the replacement works

3.1 Effects caused by the proposed routing of HGV and LGV construction traffic during the operational replacement work stage

The Applicant has confirmed the planned removal of approximately 8.2km of the internal haul roads after construction, as set out in Figure 15, Appendix C of the 'Outline Construction Traffic Management Plan' (REP3-050). This would impact on the routing of HGV and LGV construction vehicles during the operational replacement work stage and would increase traffic on the public highway through several villages, near other residential properties and other sensitive locations.

SEPE is concerned that the construction traffic will be routed through villages including Great Staughton and Pertenhall and would pass sensitive locations such as Great Staughton Primary School. This is confirmed by the Applicant in Figure 1 – Proposed Operational Phase Access Strategy, which defines the operational access route utilising sections of existing public highways and at paragraph 3.6.12:

“....vehicle movements during the operational phase, including replacement activities, would be required to route along sections of the public highway network which were not used during the construction phase, specifically Moor Road; B645 The Highway through Staughton highway; Causeway / The Town through Great Staughton; and Little Staughton Road and B660 Kimbolton Road through Pertenhall.”

It states at paragraph 3.6.21:

“Due to the presence of Great Staughton Primary School on Causeway Road, delivery movements will be scheduled to occur outside of highway peak hours and school pick-up and drop-off times...”

At paragraph 3.6.22, the Applicant downplays the impact on the village and school:

“Furthermore, as noted, the duration of the impacts in this scenario would be commensurately reduced, with effects through Great Staughton limited to a 10-week period”

SEPE assumes this 10-week period occurs each year of the replacement works, so would equate in total to approximately one year of adverse effects on the villages, Great Staughton Primary School and other communities.

Further, Table 5.5 of the Outline OEMP (REP3-053) states:

“Where operational LGV or HGV movements including those associated with maintenance, repair or replacement activities, are required to route along Causeway Road past Great Staughton Primary School, such movements will be scheduled to avoid highway network peak hours and school drop-off and pick-up periods on school days. The relevant school drop-off and pick-up periods will be confirmed in the final OEMP, having regard to the operating hours of Great Staughton Primary School and any relevant advice from the local highway authority.”

SEPE submits that this is an important issue, especially because of the potential adverse effects on sensitive locations such as Great Staughton Primary School. There is no evidence presented by the Applicant that the need to route HGV and LGV vehicles and other additional construction traffic trips through villages during the replacement works stage has been discussed and agreed with the local authorities.

SEPE also submits that the plan set out in Table 5.5 represents a materially different routing strategy from that adopted during construction and further illustrates why replacement activities cannot simply be assumed to give rise to lower environmental effects than construction without assessment of the different routes and receptors affected.

The Applicant confirms the operational stage access to the Operations and Maintenance Area will use the main site access from the B645. The Applicant proposes to use the main compound to unload the replacement components, and the materials/components would be distributed/delivered around the sites by HGV and LGV construction vehicles. The Applicant does not propose to implement a staff minibus service during the operational phase to provide a collection/drop-off service nor to transport staff from the main construction compound to the satellite compounds in Sites A, B and C. This will increase trips generated on local roads, albeit worker numbers are lower than during the construction stage.

Table 1 at paragraph 2.3.1 confirms the Scheme components/materials that will need to be replaced during the operational phase which include:

- Solar panels
- String inverter
- Centralised inverter
- Solar transformer
- Battery storage unit
- Battery transformer
- Auxiliary transformer
- Fencing – all likely to need replacing due to proposed wood posts
- CCTV

The Applicant confirms at paragraph 3.6.2 that a 16.5m articulated HGV lorry is capable of transporting 630 panels and that to replace up to 20% of panels within a single 12-month period would therefore generate a maximum of 220 HGV deliveries (440 two-way movements). The Applicant adds that realistically to be able to replace up to 20% of panels within a single 12-month period, it would be necessary to deploy at least two work crews. Furthermore, at paragraph 2.3.13 the Applicant indicates the replacement of 20% of the total panels is reasonably expected to take approximately 13 to 34 weeks, assuming a five-day working week. At paragraph 2.3.11 it states that a typical crew would comprise up to five operatives.

However, this relates to replacement of the solar panels and not those required to replace other components. SEPE estimates that, in total, using the Applicant's traffic figures, there could be up to 516 HGV/LGV deliveries (1,032 two-way movements) for the component replacement works comprising 20% of the solar panels and all the centralised inverters, solar transformers, battery storage units and battery transformers in one year. It is noted that some trips will only be generated along the section of the B645 between the A1 junction and the main compound in Site D.

SEPE submits that the replacement works during the operational phase require greater scrutiny of traffic movements, including increased volume of HGVs, LGVs and site commuter vehicles, to ensure that their impacts on the local highway network and affected villages and other properties are properly assessed and mitigated. Without a clear commitment to reinstate the internal haul road network nor define any restricted routes, the significance of effects of the increased HGV movements through villages, greater community disruption, safety risks and additional damage to local roads are unknown.

3.2 Absence of a Traffic Safety and Control Officer during this stage

The site team proposed at section 3.1 of the oOEMP does not include a Traffic Safety and Control Officer (TSCO) or a postholder with traffic control and management responsibilities for the operational/replacement works stage. A TSCO would provide a single point of contact and be responsible for planning and implementing traffic control measures, managing traffic incidents, coordinating planned roadworks and local events, and overseeing traffic response and coordination during emergencies such as a fire or explosion.

For NSIPs, appointing a TSCO (or an equivalent role under a different title) is considered good practice during key stages of construction work where traffic presents significant risks. Given the scale and extent of the East Park Energy project, involving the need to route through some villages to access the sites/multiple construction compounds, passing sensitive locations such as Great Staughton Primary School, multiple access points, significant HGV movements over extended construction periods over a range of years, the number of restricted routes and weight restrictions, and interaction with villages, cyclists, equestrians and public rights of way, appointing a dedicated competent person would be entirely reasonable to manage construction traffic safely and coordinate compliance with DCO conditions.

SEPE submits that this key role should be added to the site team for the operational phase.

See also SEPE's further Deadline 4 submission on construction traffic and transport issues.

3.3 Potential impact on soil quality and ground conditions due to the proposed approach for laydown areas and HGV deliveries during replacement works

SEPE raises concerns about the potential adverse impact on the soil quality and ground conditions caused by compaction by HGV delivery vehicles and the proposed approach for the laydown areas between the rows of panels during replacement works. The effects of this approach do not appear to have been assessed by the Applicant and there is no commitment in the draft DCO to ensure the safeguarding of soil quality during the replacement works stages. The Applicant states at paragraph 2.2.3:

“For routine maintenance operations, including replacement campaigns, there would not be a requirement for the construction compounds used during the construction phase. These construction compounds would have been

removed at the end of the construction phase and would not be re-established until the decommissioning phase. Instead, the laydown area for components would be between the rows of panels or for other equipment existing hardstanding areas.”

Further, at paragraph 2.3.18:

“At the work areas, pallets of panels would be laid down temporarily on existing stoned access tracks where appropriate or between panel rows. Should ground conditions require it, temporary ground protection matting would be deployed along access routes and laydown areas to prevent soil compaction and damage to grassed surfaces. All temporary ground protection matting would be removed following completion of the relevant works.”

The Applicant confirms at paragraph 5.2.4 of the Outline Soil Management Plan (REP3-061) that soil compaction could occur:

“It is not anticipated that there would be any major soil disturbance arising from periodic replacement campaigns of panels / inverters / transformers / BESS units. However, it is possible that during these operations that soils could become compacted by tracking from machinery. If the soil structure has been compacted, appropriate loosening will be undertaken e.g. use of a winged tine subsoiler or deep ripper, and the area re-seeded.”

SEPE is concerned that without an impact assessment and without the potential mitigation measures outlined in paragraph 5.2.4 being secured through the DCO, the ground conditions and soil quality could be irreparably adversely affected over the intervening years until decommissioning works have been completed.

3.4 Conclusion

SEPE submits that the Applicant has not adequately assessed the traffic and environmental effects of replacement works undertaken under operational conditions. In particular, the assessment does not fully consider the consequences of revised traffic routes through villages, the cumulative effects of repeated replacement campaigns, or whether the assumptions underpinning the traffic assessment are secured through enforceable provisions of the draft DCO.

The Examining Authority may therefore wish to seek further clarification regarding:

- the effects of routing replacement traffic through villages and other sensitive locations, including a local primary school;

- whether the assumptions underpinning the traffic assessment are secured through the draft DCO;
- whether additional operational traffic controls and a dedicated Traffic Safety and Control Officer are required; and
- how soil quality and ground conditions will be protected during replacement works.