SUFFOLK ENERGY ACTION SOLUTIONS'
REBUTTAL OF NGET RESPONSE TO SEAS' RELEVANT REPRESENTATION
CUMULATIVE IMPACT

SEA LINK: EN020026 **SEAS IP:** [redacted]
DEADLINE: 2 – December 9, 2025 **Date: 9 Dec 2025**

This document constitutes SEAS rebuttal to the Applicant's Response to SEAS Relevant Representation concerning "Cumulative Effects Inter/Intra" **[AS-038]** ("SEAS RR Cumulative Effects"), as set out in:

[REP1A-043] - 9.34.1: Applicant's Comments on Relevant Representations Identified by the ExA Planning Inspectorate [REP1A-043], specifically Table 2.62 "SEAS – Cumulative Assessment"

Summary

Across all topic/impact areas, it remains the case that the Applicant still has not produced a lawful or policy-compliant cumulative impact assessment (CIA), and SEAS' RR "Cumulative Effects Inter/Intra" [AS-038] (SEAS RR Cumulative Effects) stands.

National Policy Statements EN-1 and EN-5, the NPPF (2024), the EIA Regulations 2017, IEMA Principles (2022) and relevant local planning policies require cumulative effects to be identified, assessed and addressed. The Applicant has not done this. It has failed to conduct substantive CIA, including of foreseeable NSIPs such as LionLink, Sizewell C, EA1N and EA2, has been inconsistent between topic/impact areas, and has generally restricted detailed assessment work to narrow intra-project interactions, contrary to EN-1 paragraph 4.2.5.

There is nothing in the Applicant's responses to SEAS RRs as a whole, or SEAS RR Cumulative Effects specifically, that remedies the gaps and errors (and the reality is that the Applicant has offered no material new evidence, despite the length of its response to SEAS RRs).

Across the topic/impact areas, several consistent deficiencies emerge:

- **Failure to subject foreseeable cumulative schemes to actual (substantive) CIA**, even including LionLink, despite clear evidence of actual co-location and shared infrastructure with the Proposals.
- **Absence of quantitative cumulative modelling** for e.g. landscape, ecology, hydrology, transport, noise, groundwater, air quality and health impacts.
- **Incomplete or missing baseline data**, preventing cumulative evaluation (e.g., soils, ecology, traffic seasonality, hydrology, groundwater).

- **No assessment of cumulative duration**, in the form of sequential/rolling disturbance, and the prolonged multi-NSIP/major project successive burden experienced by local communities giving rise to effects over many years.
- **Lack of cross-topic integration**, with significant interactions between e.g. landscape, heritage, water, agriculture, transport, socio-economic and wellbeing impacts left unexplored.
- **Systematic deferral of essential information** to post-consent stages, preventing the Examination from understanding cumulative harm or securing mitigation.
- **Failure to consider cumulative alternatives**, including whether different siting or design choices could reduce cumulative environmental burdens.

Overall, the Applicant has not demonstrated compliance with national policy, EIA requirements or good practice. Foreseeable co-located or sequential NSIPs have been excluded from scope, preventing proper evaluation of combined effects on communities, receptors and the environment. The deficiencies identified in SEAS RR Cumulative Effects remain unresolved, and the concerns raised there remain valid.

Introduction

1. This document forms SEAS' formal rebuttal to the Applicant's response to SEAS' Relevant Representation "Cumulative Effects Inter/Intra" [AS-038] ("SEAS RR Cumulative Effects"), as presented in *Sea Link Volume 9: Examination Submissions – Document 9.34.1, Applicant's Comments on Relevant Representations Identified by the ExA* [REP1A-043], specifically Table 2.62 'SEAS - Cumulative Assessment', and also as relating to Cumulative Impact, as presented in Tables 2.49-2.61.

2. SEAS has reviewed the Applicant's responses across the various individual topic/impact areas the subject of SEAS' other Relevant Representations [RR-5210], and has elsewhere provided structured rebuttals to those responses.

3. This rebuttal evaluates whether the Applicant's submissions adequately address concerns relating to cumulative effects across the range of topics to be considered by this Examination.

4. This document is intended as a consolidated SEAS document that gathers all cumulative-impact points in the various topic-specific rebuttals and presents them in one coherent structure.

5. The structure of this submission follows the order of the SEAS' Relevant Representations as originally presented and the Applicant's corresponding responses to SEAS' points on Cumulative Impact, as presented in Tables 2.49-2.61 and 2.62 of [REP1A-043]. SEAS confirms that the deficiencies and

concerns it identified in SEAS RR Cumulative Effects remain outstanding.

6. Despite the challenges arising from the Applicant's late and incomplete submissions, SEAS continues to engage in good faith and has sought to respond constructively within the constraints of the timetable.

7. SEAS reserves the right to supplement or update these points through further written submissions as new or revised material becomes available.

A. NEEDS CASE – CUMULATIVE CONSIDERATIONS

A1. Removal of the Cumulative Needs Case

The cumulative foundation of the Applicant's Needs Case has collapsed. The original justification relied on the "Sizewell Generation Group," which included Nautilus. Once Nautilus was withdrawn, the underlying cumulative system-need fell from 1,852 MW to at most 352 MW, yet the Applicant did not revise or re-run the Needs Case to reflect this changed reality. The Applicant failed to reassess whether different spatial or technical solutions could reduce cumulative environmental burdens.

A2. Failure to Assess Cumulative Burdens of Multiple Major Projects

The Needs Case assumes future operation of multiple major assets in Suffolk — including Nautilus, these Proposals, LionLink, Sizewell C, and associated transmission infrastructure — and sets out (APP-320) considerable detail regarding their claimed *needs*, but the Applicant fails to match that with appropriate detail or evaluation here or elsewhere regarding their combined environmental or social *burdens*. The cumulative burden imposed by concentrating multiple converter stations, substations, overhead lines, and transport corridors within the same constrained landscape is not made the subject of a substantive CIA.

A3. Absence of Any Assessment of Cumulation of Alternatives/Alternatives that would reduce Cumulative Impacts

The Needs Case does not evaluate whether reinforcing or upgrading existing lines elsewhere, or spatially distributing converter stations outside Suffolk, or a combination of these or others, could reduce cumulative harm. No cumulative comparison is made between:

- clustered siting in the Sizewell/Saxmundham area, and
- dispersed siting or offshore/alternative landfalls.

This omission undermines both the strategic justification for Sea Link and the credibility of the cumulative impact assessment.

B. ALTERNATIVES – CUMULATIVE CONSIDERATIONS

B1. No Cumulative Assessment of How Siting Choices Alter Impacts

The Alternatives appraisal does not assess how different siting options would alter cumulative impacts across Suffolk or the wider region, perhaps due to the Applicant's unwillingness to recognise that its Needs Case has fallen away with the removal of Nautilus. After the collapse of the Needs Case, the Applicant did not reconsider whether alternative landfalls, brownfield options, or upgrades to existing infrastructure could reduce cumulative environmental harm.

B2. Failure to Address Cumulative Intensification from Co-Location

The Applicant does not address the cumulative intensification caused by locating Sea Link and LionLink at Saxmundham, with shared access routes, construction compounds and landscape impact zones, and factor this in to its assessment of reasonable alternatives. National Grid Group has indicated an intention for co-

location, yet the Alternatives assessment does not evaluate how, and appropriately respond to how, clustering increases cumulative effects on e.g.:

- landscape and visual receptors,
- heritage settings,
- watercourses and floodplains,
- ecological networks,
- agricultural soils,
- communities, amenity and wellbeing.

B3. Absence of Any Cumulative Comparison with Dispersed Alternatives
The Alternatives assessment provides no comparison between:

- Dispersed siting, which could reduce cumulative burdens by avoiding multi-project concentration; and
- The Applicant's preferred clustering, which intensifies cumulative harm at Saxmundham.

No transparency is provided on how the Coordination Masterplan (which confirms co-location potential) has informed the cumulative assessment. Without a cumulative lens, the Alternatives appraisal is incomplete (amongst other ways it is incomplete: see SEAS' specific RR on Alternatives within RR-5210, and see SEAS' Deadline 1 written representations and SEAS' specific rebuttal on Alternatives submitted for this Deadline 2)**.**

Nothing in the Applicant's specific response to SEAS RR Alternatives [RR-5210], or to SEAS RR Cumulative Effects [AS-038] resolves these matters.

1. LANDSCAPE & VISUAL – CUMULATIVE IMPACTS

The LVIA does not provide a valid cumulative landscape and visual assessment, nor does APP-060 (or anywhere else). The Applicant's CIA is limited, inconsistent and often absent, contrary to GLVIA3 and EN-1.

It is inappropriate not to subject cumulative landscape and visual impacts to LVIA, but that is what the Applicant has decided to do (or, rather, not do).

1.1 Omission of foreseeable NSIPs and cumulative landscape change

The LVIA itself largely treats Sea Link in isolation. It does not consider foreseeable NSIPs, including LionLink, Sizewell C and EA1N/EA2, despite their clear relevance. This omission prevents understanding of the cumulative industrialisation of the Fromus Valley and surrounding rural landscape.

Despite the Applicant's claims in its Response to SEAR RR Cumulative Effects, APP-060 does not plug this gap (nor does anything else).

1.2 Sequential and cumulative visual effects on receptors

The LVIA and the Applicant's landscape/visual evidence generally does not assess:

- sequential visibility of multiple major energy schemes along rural lanes, PRoW and approach routes;
- combined visual effects along the southern approach to Saxmundham, where converter stations, new pylons, substations, access roads and earthworks would be perceived together;
- cumulative night-time lighting or construction lighting interactions.

Without these assessments, the scale and character of cumulative change to rural receptors is understated.

1.3 Lack of adequate cumulative ZTV analysis

There is no modelling/analysis of overlapping Zones of Theoretical Visibility to understand:

- whether multiple structures increase perceived height or massing,
- whether the combination reinforces industrial character across the valley,
- whether cumulative effects extend visibility into areas otherwise unaffected.

GLVIA3 requires such analysis; its absence is a significant flaw.

1.4 Cumulative effects on designated landscapes and key sensitive receptors

The LVIA and the Applicant's landscape/visual impact evidence provides no substantive analysis of whether the cumulative presence of Sea Link, LionLink and other NSIPs degrades:

- valley landscapes and settlement edges,
- the setting of heritage assets,
- tranquillity and rural character.

EN-1 requires the assessment and minimisation of cumulative landscape harm; this has not been undertaken.

1.5 Cumulative construction impacts

Construction phases across multiple NSIPs are likely to overlap, yet the Applicant's landscape/visual evidence does not analyse the effects of:

- cumulative HGV movements,
- cumulative construction activity,
- prolonged duration of disturbance arising from multi-project sequential or concurrent works.

1.6 Summary

The landscape/visual cumulative assessment is incomplete and non-compliant. In so far as it purports to present conclusions on cumulative landscape/visual harm, it materially understates them.

The Applicant's response to SEAS RR on Landscape and Visual Impacts [RR-5210] and SEAS RR Cumulative Effects [AS-038] provides nothing that remedies these deficiencies/errors.

2. ECOLOGY & BIODIVERSITY – CUMULATIVE IMPACTS

The cumulative ecological assessment is incomplete and unreliable.

2.1 Incomplete baseline prevents cumulative evaluation

Important baseline ecological surveys remain incomplete or withheld. Without accurate data on bats, dormice, birds, reptiles and watercourse-dependent species, no cumulative ecological assessment can be robust.

2.2 Failure to assess effects of foreseeable co-located/proximate NSIPs

As set out in SEAS RR on Ecology & Biodiversity [RR-5210], at 7.1.2 onwards, the ES fails to assess the combined ecological impacts of these Proposals, with EA1N, EA2, Sizewell C and LionLink (amongst others). It ultimately scopes out LionLink from cumulative ecological assessment despite foreseeable shared works, access routes and parallel construction. This is unjustified and prevents assessment of combined habitat impacts.

2.3 Habitat fragmentation, loss and disturbance

The ES does not assess cumulative effects arising from:

- multiple linear infrastructure corridors fragmenting habitats concurrently or sequentially;
- repeated disturbance over extended construction timelines;
- cumulative loss of hedgerow networks and connectivity.

These pathways are fundamental to cumulative ecological effects.

2.4 Biodiversity Net Gain uncertainty

Without complete baseline data and without including LionLink and other NSIPs, the Applicant cannot demonstrate that cumulative biodiversity losses will be offset. The CIA does not assess long-term combined degradation of semi-natural habitats.

2.5 Summary

The ecological CIA lacks quantitative assessment and excludes foreseeable NSIPs, materially underestimating risk.

SEAS' RR on Ecology and Biodiversity stands, the Applicant having provided no new or meaningful new evidence to fill the gaps.

3. CULTURAL HERITAGE – CUMULATIVE IMPACTS

3.1 Failure to assess assets within their shared experiential setting

The Applicant assesses each heritage asset independently, ignoring cumulative degradation of the wider heritage landscape. The SEAS Heritage Impact Assessment identifies that Hurts Hall, the Church of St John the Baptist and the Saxmundham Conservation Area are experienced together in gateway views. Additional assets, including Buxlow Manor, Hill Farmhouse, Sternfield House and the Church of St Mary Magdalene, compound cumulative harm.

Although the Applicant has now provided further heritage assessment (see Appendix A to its response to SEAS' relevant representations [REP1A-043]), it continues to fail to remedy this deficiency of cumulative assessment. Ironically, the Applicant attempts to justify its earlier failure to individually assess listed buildings within the Conservation Area, on the basis that assessment of impact on the Conservation Area was sufficient, despite that approach being contrary to guidance, best practice and ultimately to statutory requirements (so in one of the isolated instances of the Appellant actually presenting a form of cumulative assessment, it did so entirely inappropriately: inevitably, individual listed buildings within the Conservation Area have their own heritage significance, requiring individual assessment of impact upon that significance).

3.2 Failure to assess foreseeable co-location of Sea Link and LionLink

The Applicant's Appendix A fails to address the co-location of the Proposals and LionLink at the Saxmundham site, despite clear evidence of shared access routes, compounds and mitigation zones. National Grid Group's Coordination Masterplan identifies Bay 2 as the preferred LionLink location, confirming shared infrastructure. This materially intensifies visual harm, landscape industrialisation and cumulative setting degradation.

LionLink's progression to statutory consultation requires the Applicant (and also the Examining Authority) to consider cumulative impacts of both projects.

3.3 Misapplication of the Rochdale Envelope

By treating these Proposals in isolation and excluding foreseeable co-located infrastructure, the Applicant has misapplied the Rochdale Envelope. This omission prevents proper cumulative assessment and undermines the reliability of Appendix A.

3.4 Combined harm across multiple assets

Even if individual impacts are categorised as less than substantial, the combined effect of two converter stations and associated infrastructure creates a pattern of setting degradation across multiple designated assets.

3.5 Types of cumulative harm

Cumulative harm includes:

- loss of rural character of the Fromus Valley and Saxmundham's southern gateway;
- permanent industrialisation of historic parkland associated with Hurts Hall;
- degradation of experiential settings where multiple assets are perceived together;
- conflict with EN-1 paragraph 5.9.36 and NPPF paragraph 213, which require cumulative effects to be assessed and avoided.

3.6 Policy conflict

The Saxmundham Neighbourhood Plan (2023), by Policies SAX10 and SAX12, requires protection of gateway views and landscape character. The co-location of two converter stations directly conflicts with these policies, not only by reason of their individual impacts, but also (and with greater force) their cumulative impacts.

3.7 Overall cumulative impact on heritage

The combined effect of multiple converter stations, the River Fromus bridge and associated infrastructure constitutes a moderate to major adverse impact across the heritage landscape. A full cumulative heritage impact assessment is required.

The Applicant's continued failure to provide one leaves the Examining Authority, and the Secretary of State, without the necessary evidence for a properly informed determination of this Application.

4. WATER ENVIRONMENT & FLOOD RISK – CUMULATIVE IMPACTS

The cumulative assessment for the water environment is incomplete and does not comply with EN-1, the NPPF, or the Flood Risk and Coastal Change guidance. The ES does not evaluate how multiple NSIPs, being constructed/then operating concurrently or sequentially, will interact to alter hydrology, drainage pathways, flood risk or water-quality baselines across the interconnected catchments of the Fromus Valley, Alde–Ore system and surrounding tributaries.

The Applicant effectively acknowledges this deficiency in its response to SEAS RR regarding water environment cumulative impacts, despite the Applicant's careful language there (pp.391-392 of NGET's response).

SEAS refers back to its RR on water and flood risk [RR-5210] and to SEAS RR Cumulative Effects [AS-038].

4.1 Absence of cumulative catchment-wide modelling

The Applicant has not undertaken cumulative hydrological modelling to show how the Proposals, together with Sizewell C, EA1N/EA2, and LionLink (let alone other major projects that are not energy NSIPs), will affect:

- peak flow rates;
- flow pathways;
- overland flow volumes;
- downstream flood risk;
- flood storage capacity within the valley.

Without cumulative modelling, the Applicant cannot demonstrate that the combined schemes will not increase flood risk elsewhere.

4.2 No cumulative assessment of surface-water, pluvial or groundwater flooding

The ES does not assess:

- cumulative surface-water accumulation where multiple impermeable areas, haul roads, bunds, or compounds are constructed at the same time;
- combined pluvial flood risk during extreme weather events across several NSIP construction footprints;
- cumulative groundwater changes resulting from trenching, dewatering, and large-scale earthworks across overlapping project timelines.

This omission is material because the Fromus Valley is a constrained corridor where small hydrological changes can have disproportionate effects.

4.3 Cumulative risk from shared watercourse crossings

The ES does not assess the cumulative effects of multiple NSIPs (let alone other major non-NSIP projects) crossing or modifying the same watercourses. This includes:

- hydromorphological change;
- bank erosion;
- sedimentation;
- disturbance of riparian habitat and priority species.

Given the limited capacity of these small watercourses, cumulative impacts must be understood.

4.4 No cumulative assessment of pollution or sedimentation risk

Multiple NSIPs operating simultaneously increase the risk of:

- sediment-laden runoff entering surface waters;
- accidental pollution events;
- cumulative loading of contaminants to watercourses;

- disturbance of groundwater-surface water interactions.

The ES provides no quantitative or cumulative analysis of these risks.

Let alone of NSIPs plus other major non-NSIP projects.

4.5 Absence of cumulative downstream effects

The Applicant does not assess how combined NSIP (or non-NSIP major projects) activities within tributaries may accumulate downstream in the Alde–Ore estuary system, which has recognised ecological sensitivities and flood-risk constraints.

4.6 Summary

It remains the case that the water environment cumulative assessment is insufficient, lacking quantitative modelling and omitting foreseeable NSIPs. As a result, the ES does not demonstrate that cumulative hydrological, surface-water and flood-risk impacts will be acceptable.

NGET's response to SEAS here is, like so many of its responses, simply to point the reader back to the ES work that SEAS RRs have already explained and exposed as inadequate.

5. GEOLOGY & HYDROGEOLOGY – CUMULATIVE IMPACTS

The geological and hydrogeological assessment does not address cumulative risks from multiple NSIPs operating across the same groundwater bodies, soils and geological formations. The Waveney & East Suffolk groundwater body is already classified as **Poor**, increasing sensitivity to cumulative disturbance.

5.1 Absence of cumulative groundwater modelling

The ES does not evaluate cumulative changes to groundwater levels, flows or quality arising from:

- trenching for cables;
- HDD works at river crossings;
- deep excavations for converter stations;
- long-term changes in permeability due to extensive construction.

Without cumulative groundwater modelling, risks to private water supplies, shallow aquifer recharge, and water-dependent habitats cannot be understood.

5.2 No assessment of cumulative dewatering impacts

Large-scale excavations across Sea Link, Sizewell C and EA1N/EA2 may require dewatering. The ES does not:

- assess combined drawdown effects;
- evaluate interactions between multiple dewatering zones;
- consider cumulative changes in groundwater pressure;
- assess the risk of settlement or subsidence arising from regional groundwater lowering.

These are significant omissions given the sensitivity of local hydrological systems.

5.3 Cumulative contamination risks

The ES does not assess risks of contaminant mobilisation or migration when multiple NSIPs disturb soils simultaneously. Potential cumulative sources include:

- historic landfill sites;
- agricultural pollutants;
- remobilised sediments;
- disturbed shallow groundwater pathways.

The cumulative risk to water quality, soil quality and receptors is not evaluated.

5.4 No cumulative geotechnical stability analysis

Multiple excavations, haul roads, earthworks and embankments can collectively alter slope stability, bearing capacity and soil compaction. The ES does not consider cumulative:

- soil compression;
- erosion;
- embankment pressure;
- settlement risks near sensitive receptors.

5.5 Interactions with climate change and other NSIPs

The ES does not combine the expected effects of climate-driven groundwater changes with cumulative construction impacts from multiple NSIPs. As such, long-term cumulative hydrogeological vulnerabilities are unassessed.

5.6 Summary

There is no cumulative geological or hydrogeological assessment. This is particularly significant given the pre-existing Poor status of the groundwater body and the scale of regional NSIP activity.

SEAS refers back to its RR.

6. AGRICULTURE – CUMULATIVE IMPACTS

The cumulative agricultural assessment is incomplete, lacks essential baseline data, and does not demonstrate how significant agricultural impacts arising from multiple NSIPs (let alone other major non-NSIP projects) will be avoided or minimised. The Applicant asserts that cumulative effects are addressed elsewhere, yet the Agriculture chapter of the ES contains no meaningful cumulative assessment and omits key pathways of cumulative harm and APP-060 does not plug that gaps. In the context of East Suffolk's concentration of large-scale energy infrastructure, this is a material deficiency.

6.1 Absence of verified baseline prevents cumulative assessment

The Applicant's permanent BMV loss figure of 23.66 ha is derived entirely from predictive mapping, which both Natural England and the Applicant acknowledge is indicative only. No ground-truthed ALC surveys have been carried out.

Because full ALC surveys will not be undertaken until **Autumn 2025**, the Examination and decision-making process must proceed **without verified baseline soil data**. This makes cumulative assessment impossible, as the true extent of BMV land at risk from Sea Link and other NSIPs remains unknown.

Without a reliable baseline, the Applicant cannot demonstrate:

- cumulative loss of BMV land,
- cumulative degradation of soil quality, or
- cumulative viability impacts on agricultural holdings.

6.2 No cumulative assessment of drainage and irrigation impacts

The Applicant provides no survey data identifying:

- the location, condition or function of field drains,
- the extent of sub-surface drainage networks, or
- hydrological linkages across agricultural holdings.

In the absence of this information, reinstatement commitments under Requirement W10/AS05 represent intentions rather than a demonstrated capability.

Cumulative effects on drainage infrastructure — where multiple NSIPs (let alone non-NSIP major projects) disturb soils, alter infiltration pathways, or impose sequential construction loads — are not assessed. This omission is significant because cumulative disruption to drainage can permanently impair agricultural productivity.

6.3 Soil Management Plan lacks enforceable cumulative performance outcomes

Although the Soil Management Plan includes procedural measures (training, monitoring, wet-weather cessation, aftercare), it contains **no measurable restoration targets**, such as:

- post-construction bulk density,
- organic matter thresholds,
- drainage capacity, or
- target ALC grade after reinstatement.

Without performance standards, it is not possible to assess:

- the cumulative loss of soil function;
- the extent of soil degradation from multiple NSIPs; or
- whether BMV land can be cumulatively restored to viable productive condition.

6.4 No project-specific thermal modelling for HVDC cables beneath farmland

The Applicant provides no project-specific thermal modelling. There is:

- no assessment of temperature rise in soils above HVDC cables,
- no evaluation of how BMV soils may respond to sustained heating,
- no modelling of moisture redistribution, and
- no cumulative analysis of long-term thermal effects.

Given the scale and sensitivity of BMV land affected by multiple NSIPs (let alone non-NSIP major projects), the absence of thermal modelling prevents understanding of cumulative impacts on soil structure, microbial activity and crop viability.

6.5 No cumulative assessment of soil degradation across NSIPs

The Applicant acknowledges that cumulative BMV loss across NSIPs is “significant,” but this conclusion is reached without:

- any cumulative analysis of soil degradation processes;
- any assessment of combined compaction from multiple construction corridors;
- any evaluation of cumulative drainage disruption; or
- any analysis of cumulative impact on farm-unit viability.

In East Suffolk, where several energy NSIPs are proposed or underway, the lack of an integrated assessment of soil health is a major policy and evidence gap. This is even before consideration is given to non-NSIP major projects.

6.6 Cumulative effects on agricultural holdings and compulsory acquisition

The Applicant cites routeing and design evolution work to justify compulsory acquisition, but none of these documents:

- assess cumulative severance of holdings;
- evaluate cumulative access disruption from multiple NSIPs;
- consider whether permanent infrastructure could be positioned on lower-quality land; or
- assess cumulative effects on operational viability of affected farms.

Reliance on compensation mechanisms does not address cumulative loss of productive capacity, nor does it satisfy the statutory tests of necessity and proportionality.

6.7 Overarching concern: cumulative deferral of essential information

Across ALC surveys, drainage surveys, thermal modelling and detailed SMP design, the Applicant indicates that essential information will be developed **after consent is granted** during the detailed design stage.

This creates a cumulative problem:

- multiple NSIPs in the region are adopting the same deferral approach;
- core agricultural evidence is repeatedly postponed;
- cumulative impacts cannot be evaluated;
- decision-makers are asked to consent schemes without understanding agricultural consequences.

This undermines the integrity of the cumulative assessment as required by the EIA Regulations and NPS EN-1.

6.8 Summary

The cumulative agricultural assessment is neither complete nor reliable. Key baseline data is missing, cumulative soil degradation and drainage disruption are unassessed, SMP measures lack performance outcomes, and essential modelling is deferred. In a region already facing multiple NSIPs, even before consideration is given to non-NSIP major projects, a robust and evidence-based cumulative agricultural assessment is required before Development Consent can properly be granted.

There has been no material change in the evidence base since SEAS' RRs: it remains inadequate, and SEAS refers back to its RRs in general, and to SEAR RR Cumulative Effects specfically.

7. TRAFFIC & TRANSPORT – CUMULATIVE IMPACTS

The cumulative Traffic & Transport assessment is critically deficient. Although the Applicant has submitted a cumulative assessment document (REP1-110 - Application Document 9.26), the Application continues to lack the detailed modelling or quantified evaluation required under NPS EN-1, NPPF 2024, or DfT transport appraisal guidance. Cumulative impacts arising from overlapping NSIPs (let alone other non-NSIP major projects), high seasonal tourist flows, rural road constraints, junction capacity exceedance, and prolonged construction timelines, remain unassessed or materially understated.

Bizarrely, the Applicant's response to SEAS RR Cumulative Effects concerning Traffic and Transport cumulative impacts (at p.393 of the response) is simply 'Refer

to responses provided in Table 1.6 *Agriculture & Soils,* paragraphs 5.1-5.4, in this document'. That makes no sense, but serves to underline the Applicant's lack of any substantive response to, or evidential remedy for, the deficiencies SEAS has identified. REP1-110 (document 9.26) does not do so, despite its length.

7.1 Invalid baseline undermines the cumulative assessment

As SEAS has explained many times, the ES relies on traffic surveys undertaken in **January and February 2024**, which are **non-neutral, low-traffic months**. The Applicant has not corrected for seasonality despite acknowledging that traffic flows are higher at certain times of year due to tourism and local events.

Independent evidence shows that **flows are approximately 25% higher in summer**, greatly increasing baseline congestion and delay. Without representative baseline data, cumulative assessment is fundamentally flawed, as baseline conditions dictate whether cumulative increases produce **severe residual impacts** under NPPF paragraph 116.

The Applicant asserts that higher baselines would reduce percentage impacts, but this misunderstands the requirement to consider **absolute impacts and actual operating conditions**, not proportional change. This error is repeated throughout the cumulative analysis (just as it is repeated in the traffic/transport analysis as a whole). The Applicant wilfully shuts its eyes to the fact of the actual traffic on the roads, and what additional traffic on top of that will mean for congestion, safety and environmental impacts generally, and conducts an exercise in sophistic argument concerning percentage change.

7.2 No cumulative junction modelling despite known congestion pressures

The cumulative assessment contains no junction modelling cumulative impact analysis, even though:

- multiple NSIPs may overlap;
- key junctions on the **A12** and **A1094** already face performance constraints;
- more than 30 hourly development vehicles are forecast at the A12/B1121 South junction;
- the Applicant acknowledges significant HGV proportions.

The Applicant states that further junction modelling is unnecessary, but Suffolk County Council's Local Impact Report clearly identifies:

- a lack of modelling;
- several junctions close to or over capacity even **before** considering Sea Link or other NSIPs (let alone other non-NSIP major projects);
- concerns that reliance solely on IEMA significance categories hides localised severe impacts.

Without cumulative junction modelling, the ES cannot conclude that cumulative effects will not be severe.

7.3 Cumulative effects of inappropriate rural-road routing

The cumulative CIA fails to assess combined impacts on narrow, high-sensitivity rural routes, including those previously deemed unsuitable for NSIPs during EA1N/EA2 (B1121, B1119).

The Applicant dismisses very large percentage changes in HGVs (e.g., a **157% increase** on the B1121) on the grounds that absolute changes are small, even though small absolute increases on constrained rural roads can produce major cumulative adverse effects (not least as regards safety and underlying sense of threat).

The Outline CTMP acknowledges that **physical mitigation may be required** but does not specify any location-specific proposals or binding commitments. This prevents evaluation of cumulative suitability and safety.

7.4 Insufficient cumulative consideration of Abnormal Indivisible Loads (AILs)

Suffolk County Council highlights major cumulative risks associated with the **Benhall Railway Bridge**, noting:

- a **46-tonne weight restriction**;
- structural uncertainties;
- concerns regarding AILs and potential diversion of AIL traffic onto the already constrained A12.

The ES does not assess how AIL traffic from Sea Link and other NSIPs cumulatively affects bridge safety, congestion, or local access.

7.5 Weak and unenforceable mitigation prevents cumulative control

The Applicant's cumulative approach relies entirely on the **future refinement** of the CTMP and later consultation with SCC Highways. There are:

- no binding caps on HGV movements;
- no time-of-day restrictions;
- no committed physical mitigation;
- no enforceable route controls;
- no coordination agreements with other NSIPs.

This lack of secured mitigation means cumulative risks cannot be managed in practice.

7.6 Cumulative impacts on Public Rights of Way (PRoW)

The Applicant acknowledges **large and medium magnitudes of change** to several PRoW but concludes that effects are "not significant". This conclusion is not evidence-based.

Cumulative PRoW impacts include:

- prolonged closures across multi-NSIP timelines;
- loss of amenity for walkers, cyclists and equestrians;
- cumulative severance when PRoW are repeatedly diverted or degraded;
- diminished recreational experience due to HGV traffic, dust, noise and landscape change.

These impacts are not addressed cumulatively and conflict with EN-1 paragraph 5.14.9.

7.7 The Applicant's cumulative assessment documentation (REP1-110) remains insufficient

Application Document 9.26 (REP1-110) acknowledges multi-NSIP interactions but provides only descriptive assessment:

- It includes **no detailed modelling** of cumulative flows.
- It relies solely on IEMA guidance without quantitative analysis.
- It confirms that Sea Link **cannot control other projects' schedules**, making coordination measures aspirational.
- It assumes all mitigation by other NSIPs will be delivered on time, without contingency for delays.

This is not a lawful or robust cumulative assessment.

Descriptive assessment without substantive assessment, including necessary quantitative evidence and assessment, is, ultimately, simply playing with words, not providing the hard evidence this Examination needs.

7.8 Cumulative seasonal, regional and construction-period impacts remain unassessed

The ES does not consider:

- multi-year overlap of construction timetables for Sea Link, Sizewell C and EA1N/EA2;
- summer peak congestion combined with cumulative NSIP HGV flows;
- cumulative safety impacts where baseline collision risk is already elevated.

Given extended timelines, cumulative impacts on local communities could persist for many years, yet the ES does not evaluate this.

7.9 Summary

The cumulative Traffic & Transport assessment:

- relies on unrepresentative winter traffic data;
- omits cumulative junction modelling;
- ignores cumulative seasonality pressures;
- uses unsuitable rural routes without secured mitigation;
- provides no enforceable cumulative controls;

- misunderstands the role of absolute vs proportional impacts under NPPF 2024;
- offers only descriptive, non-quantitative cumulative assessment.

As a result, the CIA materially understates cumulative transport risks and does not demonstrate that the scheme will avoid **severe residual impacts** on the transport network.

8. AIR QUALITY – CUMULATIVE IMPACTS

The Air Quality cumulative assessment is incomplete, unquantified and non-compliant with EN-1, the EIA Regulations and the Air Quality Standards Regulations. The Applicant confirms that cumulative assessment across multiple NSIPs is **qualitative only**, with no cumulative emissions modelling for dust, vehicle emissions, NRMM or generators. This is a fundamental evidential gap given the scale and duration of overlapping regional NSIPs.

8.1 Absence of cumulative emissions modelling across NSIPs

Despite the coexistence of Sea Link, Sizewell C, EA1N/EA2 and LionLink (let alone non-NSIP major projects), the Applicant undertakes no cumulative modelling for:

- construction-phase dust emissions,
- $PM_{2.5}$ or PM_{10} concentrations,
- cumulative NO_2 or NOx emissions from construction traffic,
- NRMM emissions,
- generator emissions.

A qualitative narrative does not satisfy EN-1 or the EIA Regulations. Without quantified cumulative assessment, there is no basis for concluding that cumulative air-quality effects will be acceptable.

8.2 Unresolved model underprediction undermines all cumulative conclusions

The dispersion model required a verification factor of **3.79**, indicating severe underprediction of NO_2. The Applicant provides:

- no explanation for this level of model error,
- no sensitivity testing,
- no additional verification using alternative datasets.

Because the baseline model does not reliably predict concentrations, **any cumulative assessment derived from it is inherently unsound**. The uncertainty is particularly serious when multiple NSIPs contribute simultaneously to pollutant levels.

8.3 No quantitative assessment of NRMM or generator emissions

The Applicant provides **no numerical emissions estimates** for NRMM or backup generators, despite their potential to contribute significantly to cumulative concentrations over a multi-year construction programme. The reliance on professional judgement is inadequate for a project of this scale, and makes cumulative evaluation impossible.

8.4 No operational cumulative air-quality assessment

EN-1 requires assessment of all stages of a nationally significant infrastructure project.
However, the Applicant:

- provides **no operational emissions modelling**,
- provides **no quantified generator emissions**,
- offers no cumulative operational scenario combining Sea Link with other NSIPs.

This persistent omission prevents robust decision-making on long-term cumulative impacts.

8.5 Mitigation is generic and unenforceable, preventing cumulative control

The CEMP, REAC and Outline Air Quality Management Plan contain only high-level commitments. There are:

- no enforceable dust limits,
- no $PM_{2.5}$, NO_2 or NOx thresholds,
- no trigger levels,
- no binding response protocols.

Without enforceable controls, cumulative emissions from multiple NSIPs cannot be managed or mitigated.

8.6 Policy compliance is claimed but not evidenced

The Applicant asserts compliance with EN-1, the Air Quality Standards Regulations and the EIA Regulations, yet fails to provide:

- complete baseline verification,
- cumulative emissions modelling,
- quantified NRMM or generator emissions,
- operational modelling,
- enforceable mitigation.

Compliance is asserted but not demonstrated.

8.7 Summary

The Applicant’s responses do not resolve any of the air-quality issues raised by SEAS. Key assessments remain incomplete, unverified and unquantified, and the

lack of enforceable mitigation prevents effective management of cumulative emissions. Without:

- full quantitative cumulative air-quality modelling for all overlapping NSIPs,
- quantified NRMM and generator emissions,
- a complete operational-phase assessment,
- and enforceable mitigation thresholds,

the application does not meet the requirements of EN-1, the EIA Regulations or the Air Quality Standards Regulations.

SEAS refers again to its RRs.

9. NOISE & VIBRATION – CUMULATIVE IMPACTS

The cumulative noise and vibration assessment is inadequate and does not comply with EN-1, EN-5 or the EIA Regulations. The Applicant provides no cumulative modelling, no enforceable noise limits and relies on generic assumptions that prevent meaningful evaluation of cumulative effects alongside other NSIPs.

9.1 No enforceable operational noise limit prevents cumulative control

The Applicant does not propose any legally binding operational noise Requirement in the DCO. Instead, the stated 34 dBA threshold is only an “aim”. Without an enforceable limit, cumulative operational noise from these Proposals, LionLink and any future co-located NSIPs cannot be regulated or assessed. The absence of binding limits makes cumulative noise management impossible.

9.2 Generic, unverified noise source data prevents cumulative modelling

Operational noise predictions are based on a generic converter station design that the Applicant accepts is indicative only. No evidence demonstrates that this represents a true worst-case sound power level. Cumulative modelling requires verified source data; without it, cumulative assessments for Sea Link and LionLink cannot be undertaken.

9.3 No low-frequency or spectral assessment despite cumulative relevance

The Applicant provides no octave-band sound power data for transformers. Low-frequency tonal components at 100–200 Hz are critical for cumulative assessment because they propagate over long distances, can reinforce between multiple converter stations, and may produce cumulative indoor amplification. These pathways are unassessed.

9.4 No assessment of cumulative indoor effects, resonance or interference

The ES assumes a 15 dB outdoor-to-indoor reduction without assessing resonance effects or constructive interference between multiple industrial low-frequency

sources. With potential co-location of Sea Link and LionLink, cumulative indoor tonal impacts could be materially greater than for a single NSIP, yet remain unexamined.

9.5 No cumulative construction noise assessment despite overlapping NSIPs

The ES contains no cumulative construction noise modelling. The Applicant assumes uniform mitigation (e.g., 10 dB reduction) without demonstrating feasibility. Multiple NSIPs — these Proposals, LionLink, Sizewell C, EA1N/EA2 — may overlap, resulting in prolonged cumulative disturbance, elevated noise exposure and extended loss of tranquillity. None of these cumulative pathways are assessed. This is even before consideration is given to non-NSIP major projects.

9.6 Unresolved uncertainty in predictions invalidates cumulative conclusions

The expert review identifies significant uncertainty in the Applicant's operational predictions, including lack of spectral data, unverified source terms and reliance on context-based judgement for BS 4142 classification. Uncertainty at the single-project level means cumulative conclusions cannot be relied upon.

9.7 Summary

The Applicant provides no cumulative noise modelling, no binding operational limits, no cumulative construction noise assessment and no evaluation of cumulative low-frequency, indoor or multi-project interactions. These omissions prevent meaningful assessment of cumulative noise and vibration effects and undermine the conclusion that cumulative impacts will be acceptable.

10. SOCIO-ECONOMICS, RECREATION & TOURISM – CUMULATIVE IMPACTS

The socio-economic CIA is incomplete and does not provide a realistic assessment of cumulative impacts on tourism, recreation, local businesses or community wellbeing. Suffolk's visitor economy is highly sensitive to perceptions of landscape, tranquillity and rural character. The ES does not assess how the combined effects of the Proposals, Sizewell C, EA1N/EA2, and LionLink will alter this contextual perception.

10.1 No cumulative tourism assessment

The ES provides no evidence-led evaluation of how multiple NSIPs may cumulatively affect:

- visitor behaviour;
- seasonal tourism flows;
- accommodation availability during peak construction;
- visitors' experience of tranquillity-based destinations.

The Applicant relies on assumptions rather than empirical evidence, even though Suffolk's tourism economy is known to be sensitive to industrialisation and construction disruption.

10.2 Absence of cumulative perception analysis

The CIA does not consider how the perception of the Suffolk coast and inland landscapes will change when multiple large-scale energy projects operate or are constructed at the same time. This includes:

- cumulative landscape industrialisation;
- cumulative loss of tranquillity;
- sequential visibility of NSIPs along visitor routes;
- cumulative effects on coastal and market-town character.

These issues are critical for tourism and community identity.

10.3 No cumulative recreational impact assessment

The ES does not assess cumulative impacts on:

- public rights of way and long-distance footpaths;
- cycle routes and country lanes used for recreation;
- access to green spaces;
- recreational amenity around Saxmundham, the Fromus Valley and nearby villages.

Cumulative construction, noise, traffic and landscape effects are all omitted.

10.4 No cumulative assessment of economic disruption

The ES does not consider:

- cumulative labour displacement when multiple NSIPs draw from the same workforce;
- cumulative pressure on local services, accommodation and infrastructure;
- cumulative effects on local business trading conditions due to prolonged multi-project construction activity.

10.5 Failure to assess combined impact with existing stressors

Suffolk communities are already experiencing prolonged disturbance from existing and proposed NSIPs. The ES does not consider the compounding nature of this ongoing disruption.

10.6 Summary

The socio-economic CIA does not address cumulative tourism, recreation or community impacts. This omission materially understates the scale of disruption and economic risk associated with the clustering of NSIPs in this region.

Again, SEAS refers to its RRs.

11. HEALTH & WELLBEING – CUMULATIVE IMPACTS

The Health & Wellbeing cumulative assessment is critically deficient. Instead of providing a cumulative impact assessment, the Applicant summarises environmental topics and asserts that significant cumulative effects are unlikely. This is not a cumulative health assessment and does not meet EIA, IEMA or policy requirements.

11.1 No cumulative psychosocial assessment

The ES does not assess the cumulative psychosocial burden arising from:

- prolonged multi-NSIP construction activities;
- cumulative loss of control and uncertainty;
- cumulative stress, anxiety and fatigue;
- repeated disruption of rural life;
- cumulative degradation of familiar landscapes and community identity.

These are core determinants of health and wellbeing.

11.2 Omission of foreseeable regional NSIPs

The ES excludes LionLink and other foreseeable NSIPs from cumulative health assessment, despite known co-location, shared access, overlapping construction and shared communities.

This prevents proper evaluation of cumulative health pathways.

11.3 Failure to follow IEMA guidance

IEMA guidance requires assessment of:

- combined stressors;
- simultaneous and sequential disturbance;
- vulnerable populations;
- chronic stress effects;
- lived-experience data.

The ES does not provide any of these. There is no evidence-based assessment of cumulative impacts on mental health.

11.4 No cumulative assessment of vulnerable groups

Communities in Leiston, Saxmundham, Yoxford and neighbouring rural villages have been subject to prolonged uncertainty and anxiety associated with multiple NSIPs. The ES does not evaluate:

- cumulative health impacts on elderly residents;
- young people;
- carers;
- individuals with pre-existing health conditions;
- socio-economically disadvantaged households.

This omission is significant in Examination terms.

11.5 No interaction between cumulative environmental stressors

The ES does not assess combined impacts of:

- cumulative noise and construction disturbance;
- cumulative visual/landscape industrialisation;
- cumulative transport disruption;
- cumulative ecological and recreational loss;
- cumulative socio-economic pressure.

Combined stressors may have major cumulative effects even where individual environmental impacts are assessed as moderate or less.

11.6 Underestimation of long-term community burden

Suffolk faces a multi-decade programme of overlapping NSIPs. The Applicant does not consider:

- long-term cumulative fatigue;
- chronic anxiety;
- erosion of wellbeing from prolonged infrastructure concentration;
- cumulative construction cycles that prevent recovery between projects.

11.7 Summary

The ES does not contain a cumulative health impact assessment. It provides no evidence to support its conclusions and does not meet required standards. The omissions in cumulative psychosocial and long-term wellbeing assessment are particularly significant given the scale and duration of regional NSIPs.

CROSS-TOPIC CUMULATIVE ANALYSIS

The cumulative-impact omissions identified across topics interact and reinforce one another. Key cross-topic findings include:

C1. Co-location amplifies cumulative harm across disciplines

The intention to co-locate the Proposals and LionLink at Saxmundham fundamentally increases:

- landscape change;
- heritage setting harm;
- hydrological disruption;
- ecological fragmentation;
- socio-economic disruption;
- psychosocial stress.

Failure to consider co-location in every topic materially undermines the CIA.

C2. Absence of cumulative modelling (hydrology, groundwater, noise, traffic, air quality)

Across major topics, the ES contains:

- no cumulative hydrological modelling;
- no cumulative groundwater modelling;
- no cumulative noise modelling;
- no cumulative transport modelling (mere descriptive assessment is not modelling);
- no cumulative air-quality modelling.

Without quantitative cumulative modelling, the ES cannot demonstrate that impacts will remain within acceptable levels.

C3. Cumulative duration and sequential NSIP burden

Communities face long sequences of overlapping NSIPs. The ES does not assess:

- cumulative duration of construction disturbance;
- combined fatigue effects;
- loss of amenity over multi-decadal timescales;
- inability of communities to recover between projects.

C4. Interactions between environmental, economic and health effects

Cumulative effects intersect:

- landscape + heritage = diminished sense of place;
- landscape + tourism = economic risk;
- hydrology + agriculture = local livelihood impacts;
- noise + traffic + visual impacts = cumulative wellbeing harm;
- construction traffic + air quality = compounding physical health pressures.

The ES does not address these interlinkages.

C5. Systematic exclusion of foreseeable NSIPs

Across all topics, the ES scopes out or effectively scopes out:

- LionLink;

- Sizewell C interactions;
- EA1N/EA2 cumulative pathways;
- other relevant infrastructure proposals.

This is a striking and consistent flaw across all cumulative-impact topics.

CONCLUSION

The Applicant's responses do not remedy the substantive deficiencies identified in SEAS' Relevant Representations, as also set out in SEAS' topic/impact area-specific rebuttals that are also submitted at this Deadline 2. Across all topics/impact areas, the Applicant continues to provide a cumulative assessment that is incomplete, inconsistent and not compliant with the requirements of EN-1, EN-5, the NPPF (2024), the EIA Regulations or relevant local planning policies.

Core components of a lawful cumulative impact assessment remain absent. The Applicant has provided no quantitative cumulative modelling for hydrology, groundwater, landscape, noise, transport, air quality or ecology, and has systematically excluded the cumulative impacts of foreseeable NSIPs — particularly LionLink, Sizewell C, EA1N and EA2 — despite clear potential for shared impacts and co-located infrastructure. Key baseline information essential to cumulative analysis remains incomplete or deferred to post-consent design stages.

The Alternatives and Needs Case assessments do not respond to the falling away of the Applicant's Needs Case, nor evaluate how different siting or design choices could reduce cumulative harm, nor do they address the cumulative implications of clustering major infrastructure around Saxmundham. There is no cross-topic evaluation of how environmental, socio-economic and wellbeing impacts interact or compound over multi-decadal construction and operational periods.

As a result, the Applicant has not demonstrated that cumulative environmental, social or community impacts will be acceptable or can be mitigated. The CIA does not meet the evidential or policy standards required for decision-making under the Planning Act 2008, and the concerns raised in SEAS' Relevant Representation remain outstanding.

SEAS reserves the right to update and extend this cumulative effects rebuttal as new or revised material becomes available.