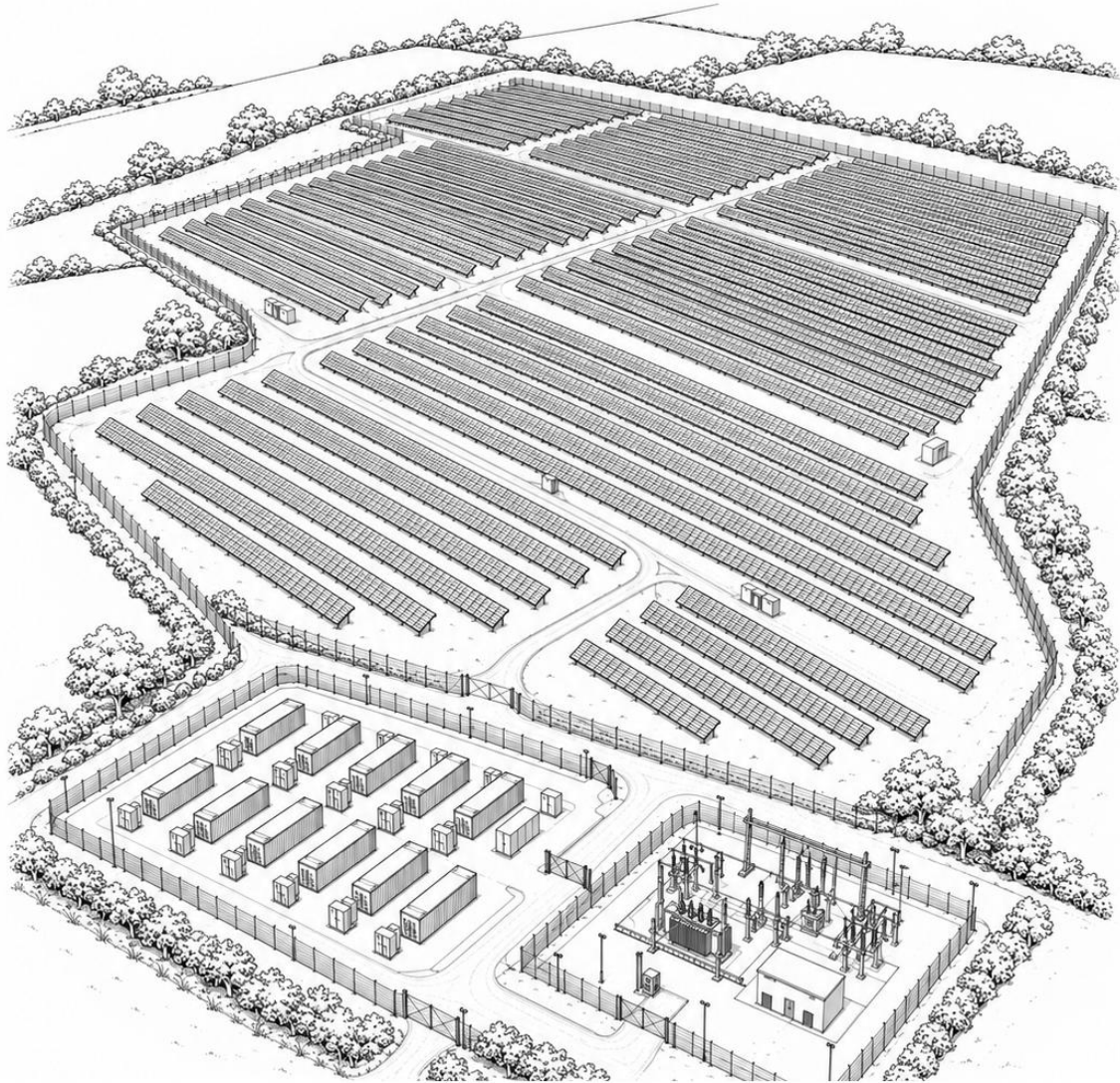


Objection to East Pye

Development Consent Order (DCO) Case No. EN0110014



Rob Shipway

Local Resident

Interested Party Ref [REDACTED]

6th October 2026

Personal Foreword - Where is the Plan on the Wall?

I began my planning career as a year out student in the mid-1970s with Northampton Development Corporation. That organisation had not - contrary to my expectations - been given the task to decide, project by project and application by application, whether individual developments might be acceptable. Instead, it had been given a much larger job: to help deliver the expansion of Northampton as part of the New Towns programme, with the infrastructure, housing, employment, schools, shops, open spaces and other facilities required to make that expansion work as a place.

Please bear with me, there is a point that I will get to make in good time.

What I remember most clearly is the sense of common purpose. There was an agreed need, there were clearly articulated goals, and there was a long-term programme for achieving them. Huge plans covered the walls, showing the progressive rollout of new neighbourhoods over many years ahead. Some carried names which, to a young planner, seemed almost romantic in their combination of place and programme - Ecton Brook 5, Lumbertubs 3 and many others. Whatever the imperfections of the system, there was a visible plan. One could stand in front of it and see not simply the next development proposal, but the intended shape of the town that was to emerge.

There was also a strong sense that the state knew what it was trying to achieve, and accepted responsibility for coordinating its delivery. Roads, schools, housing, employment land and community facilities were not treated as unrelated projects competing for space. They were parts of the same exercise. The individual schemes mattered, but their justification and their relationship to one another came from the larger plan.

None of this is to suggest that New Town development was universally popular, or that central direction somehow removed controversy. It plainly did not. When [REDACTED] - the Minister responsible for the New Towns - visited Stevenage in 1946, opponents famously altered railway station signs to read 'Silkingrad'.

Large-scale planned change has always generated conflict, even sometimes fierce resistance. But opposition existed within a framework in which the purpose of the programme was relatively clear. There was something tangible to support, oppose, amend or criticise. There was, in that sense, an identifiable collective project.

Looking at the present planning of renewable energy infrastructure, I find myself repeatedly returning to a much simpler question: where is the equivalent plan on the wall? We have national targets, policy statements, grid strategies, connection queues, individual Development Consent Order applications, Town and Country Planning Act applications, solar farms, battery energy storage systems, substations and new transmission infrastructure. Each has its own justification and its own consenting route. What is much harder to see is the physical plan which shows how all these components are intended to fit together in particular places and what the resulting landscape and settlement pattern is expected to become.

That distinction seems to me increasingly important. A system may have very sophisticated national objectives and yet still be spatially naïve. Indeed, the more ambitious the programme, the greater the need for an intelligible view of its cumulative physical consequences. The present process can appear to proceed in the reverse order: individual projects are promoted, examined and consented, while the larger pattern emerges incrementally from the accumulation of those decisions.

The DCO process is rigorous in many respects, but it does not necessarily resolve this more fundamental issue. An Examining Authority is asked to examine the project before it. It can consider alternatives, cumulative effects and the policy need for the development, but it is not charged with designing the overall renewable energy system for the locality. Nor is an individual promoter responsible for doing so. The danger is that no participant is truly responsible for answering the spatial question that used to be embodied by those large plans on the wall. I find this in my objection 7 (BESS Fire and Safety Hazard Grounds): no single body taking a holistic look at matters. No worldview. Very much, perhaps, *de nos jours*.

This leaves me uncertain whether, in planning terms, we are underplanning or overplanning - or perhaps even doing both at the same time. We may be underplanning because there is insufficient strategic spatial direction over where major solar generation, BESS, substations and transmission infrastructure should be concentrated and how much development particular areas can reasonably absorb. At the same time, we may be overplanning by over-consenting individual projects because each one can be justified by reference to a broad national need without there necessarily being a settled view of the total amount, combination and location of development required.

That is not an argument against renewable energy, nor is it a misty eyed view of a planning system that never existed in perfect form. It is a reflection born of having spent a career in planning and having started that career in an organisation where the relationship between strategic purpose and physical delivery was unmistakably visible – a responsibility that was indeed maintained by subsequent employers. The question I now find myself asking is whether the present system gives decisionmakers, communities and promoters a sufficiently clear-eyed view of the physical outcomes they are collectively creating.

My subsequent objections and observations therefore sit within a wider concern. They are necessarily directed at particular proposals and particular effects, but behind them lies a more general unease about the way major energy infrastructure is being planned. The issue is not simply whether each project, considered separately, can be made acceptable. It is whether the cumulative result is the product of an intelligible plan at all.

I do not suggest that these wider concerns can be resolved within the present DCO examination. They cannot. The examination of East Pye cannot repair the absence of a wider spatial plan for the renewable energy infrastructure that may ultimately be concentrated in this part of South Norfolk, nor can the Examining Authority be expected to devise such a plan itself.

By way of considerable mitigation there is, however, something that the Examining Authority can quite reasonably do. It can look beyond the immediate red line and consider the wider ramifications of the East Pye proposal: not simply the scheme itself, serious though I consider its individual harms to be, but the extent to which its infrastructure - and in particular the new Great Moulton grid connection on which it depends - may become the harbinger of much, much more development. That is the essence of the case I develop in Objections 2 and 3. Those objections are concerned with different aspects of the same central question: what further development may be enabled, attracted or made more likely by the infrastructure now being examined, and what issues might such development raise? In many respects, I think that question goes to the heart of the Examination.

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Summary of Objection

This submission objects to the East Pye Solar Development Consent Order on seven related grounds. I accept the national need for renewable energy, the importance of decarbonisation and the substantial weight given to renewable-energy and electricity-network development. My objection is site-specific: whether the benefits of East Pye, in the form and location proposed, outweigh the environmental, community, infrastructure and safety harms that would arise from authorising it. On the evidence assembled here, I consider that they do not.

Objection 1 addresses the direct effects of East Pye, concentrating on the proposed agglomeration of electrical infrastructure around Great Moulton. The development would include a permanent NGET 400 kV substation, East Pye project substations, a grid-scale BESS, transformers, cable terminations, overhead-line and pylon works, and associated works.

Together these would form a substantial electrical complex in a predominantly rural landscape. Planting, bunding and other mitigation may reduce some views but cannot remove the taller 400 kV structures and overhead-line infrastructure. Construction would also bring prolonged HGV activity, abnormal loads, compounds, road works, noise, dust and disruption. My case is that these direct landscape, visual, amenity and construction effects are material in their own right.

Objection 2 concerns the permanent 400 kV transmission infrastructure that East Pye would facilitate at Great Moulton. I refer to it as the Great Moulton (Long Stratton) connection because a Long Stratton description alone understates its relationship with Great Moulton village and countryside. The Examination should establish what East Pye alone requires, the node's capacity and expansion capability, what would remain after decommissioning, and whether it could facilitate later generation, storage, demand or network projects.

Further development is not inevitable, but a new permanent 400 kV node can alter the practical geography of future connection opportunities. That enabling effect should be understood before consent is granted.

Objection 3 tests whether further clustering is supported by evidence. Public planning material, the NESO TEC Register and related sources identify renewable-energy, battery-storage and electricity-infrastructure projects associated with Long Stratton 400 kV, North Anglia Connection Node A or the immediate Great Moulton area. Their status varies, and public information on location, Gate status, land readiness or connection assumptions is incomplete for some.

I do not treat uncertainty as proof that all will proceed. I ask the ExA to obtain the best available evidence and determine whether the new connection is more realistically understood as an isolated East Pye asset or as infrastructure capable of supporting a de facto Great Moulton Energy Hub.

I sought clarification under the Environmental Information Regulations 2004 from NGET on 18 August 2026 and NESO on 21 September 2026 on matters central to Objections 2 and 3. At the

date of this submission I had received acknowledgements but no substantive response; NGET had advised that it could not respond within the normal 20-working-day period. I have therefore worked from public evidence and distinguished established facts from inference and speculation.

The ExA is not confined by the same limitations. Where NGET or NESO holds material information on the purpose, capacity, location or connection status of relevant infrastructure and projects, I ask the Examination to obtain it directly.

Objection 4 considers cumulative and in-combination consequences if a concentration of development around the new connection is reasonably foreseeable. The assessment should not be confined to red-line boundaries or single project programmes. Residents, walkers, riders and road users may experience several solar, BESS, substation and overhead-line schemes simultaneously, successively or sequentially. Construction effects may also overlap, including HGV and abnormal-load movements, traffic management, road closures, dust, noise, public-rights-of-way disruption and pressure on local communities and services.

Where precise future locations or programmes remain uncertain, the appropriate response is proportionate sensitivity and reasonable worst-case testing rather than assuming wider effects away.

Objection 5 addresses the potential industrialisation of the countryside. I do not suggest that every field would be developed or that South Norfolk would cease to be rural. The issue is whether the scale, repetition and functional character of solar arrays, substations, BESS, transformers, pylons, security infrastructure and engineered mitigation would cause electricity infrastructure to become a defining feature of the locality.

Rural character is experienced through quiet lanes, public rights of way, open skies, field patterns, tranquility and the relationship between villages and countryside. A landscape can remain green while its identity and “lived experience” changes materially. I therefore ask the ExA to consider industrialisation, sense of place and community identity as planning effects in their own right.

Objection 6 widens the spatial assessment. The proposed node would lie between the established 400 kV substations at Norwich Main and Yaxley. I describe the resulting strategic pattern as a Norwich Main-Great Moulton-Yaxley Energy Corridor. I do not suggest that every project connected at Norwich Main or Yaxley is caused by East Pye, or that continuous development is inevitable.

The issue is whether adding a permanent intermediate transmission node changes the pattern of opportunities for renewable generation, storage and network development across a wider geography, and whether the landscape, traffic, land-use, amenity and community implications have been examined at an appropriate scale.

Objection 7 concerns the proposed grid-scale BESS and the adequacy of the fire and hazard safety case. I do not contend that battery storage is inherently unsafe. I contend that a

development of this scale, alongside major high-voltage infrastructure, requires sufficiently certain, independent and site-specific assessment before consent. The Examination should understand credible scenarios involving fire, propagation, explosion, toxic emissions, contaminated firewater, electrical isolation, emergency access and interaction with adjoining electrical infrastructure.

It should also test matters left to later technology selection, detailed design or testing; absence of objection from individual consultees is not a substitute for a coherent real-world safety assessment. Companion Document 7A, my August 2026 report (prepared entirely separately from this submission but nevertheless highly relevant to it) on wider BESS fire and hazard safety issues identifies a significant gap in the regulatory framework around “real world” risk assessment. It is submitted separately as background to this objection.

The seven objections are intentionally distinct but sequential. They move from the direct effects of East Pye, through the enabling role of the Great Moulton transmission infrastructure and evidence of other potential projects, to cumulative effects, industrialisation, the wider energy-corridor question and BESS safety. Each objection separates a short non-technical context from the matters the Examination needs to cover, questions for relevant organisations, the formal objection and its reasoned justification. This distinguishes evidence, professional judgement and matters requiring clarification.

Two points of terminology and scope are important. References to East Anglia Node A appear alongside references to a Long Stratton or Great Moulton connection. For this submission I have proceeded on the basis that there is a high probability they are the same infrastructure; if the Examination establishes otherwise, that would be material.

My representations are also deliberately selective. I have not prepared separate objections on every Environmental Statement topic, nor attempted a full landscape critique of solar arrays around all affected settlements. Those omissions do not signify agreement with the Applicant; they reflect a decision to focus on a defined evidential case.

The planning balance is straightforward in principle. National need is real and merits substantial weight, but it does not determine whether this particular development should be authorised irrespective of place and consequence. The ExA should assess both the development directly proposed and the reasonably foreseeable consequences of the permanent infrastructure it would establish.

On the evidence presently available, East Pye would cause substantial direct landscape and construction harm; create a permanent 400 kV node whose wider enabling role is insufficiently resolved; give rise to a credible prospect of further clustering and cumulative development; contribute to the risk of industrialisation of the rural landscape and a wider energy corridor; and authorise a major BESS without, in my view, a sufficiently complete site-specific safety case. Unless those matters are satisfactorily resolved by evidence and, where appropriate, enforceable controls, I ask the Examining Authority not to recommend that the DCO be granted in its present form.

What this submission covers

This submission is deliberately selective. It does not attempt to address every environmental, planning or technical issue raised by the East Pye Solar Development Consent Order application. That is not because matters omitted from my representations are necessarily unimportant, nor because I accept the Applicant's assessment of them. It reflects a conscious exercise of triage.

Time available to prepare my representations has been limited. I have also chosen to prepare my objection independently rather than seeking to align, coordinate or link it with objections made by other interested parties. I have therefore concentrated my available time on those matters which, in my judgement, are both material to the Examination and capable of being supported by evidence sufficiently robust to justify placing them before the Examining Authority.

This submission is entirely consistent with the initial objections I made on 8 June, as required by the Examination timetable. It does not depart from or replace those objections; rather, it represents a considerable expansion and development of the thoughts and concerns first identified at that stage, informed by the further evidence and analysis I have since been able to undertake.

As I explain in the separate "About Me" section below, I am a planner and infrastructure adviser whose professional career has spanned approximately 45 years. That experience has influenced the approach I have taken. I have sought to be scrupulous in distinguishing between matters which I consider properly relevant to the Examination and matters which, however interesting or contentious, do not in my judgement assist the Examining Authority in determining this application.

For that reason, there are a number of arguments which this submission expressly does not make.

I do not suggest that the East Pye Solar scheme, or development of this general kind, is unnecessary in principle. I do not argue that the national need for additional renewable generation is a false assumption or is overstated. I do not suggest that the required generation can simply be substituted by placing solar panels on domestic, commercial or industrial roofs. Nor do I question the integrity, professional motivation or good faith of Island Green Power, its project partners, its consultants or the professional teams responsible for preparing the application.

My starting point is substantially the opposite. Large-scale renewable energy development, including solar generation, has an important role in decarbonising the energy system. The need to respond to climate change is supported by a substantial body of evidence, and I do not dispute either the reality of climate change or the importance of reducing carbon emissions. I therefore approach East Pye from a position which accepts that renewable energy infrastructure of this general nature is required and that significant weight should properly be given to that need.

The central question raised by my representations is narrower and more site specific.

It is whether the acknowledged need for renewable energy development is sufficient to outweigh the particular harms which would arise from authorising East Pye in the form and location now proposed.

My conclusion, having examined the matters covered by this submission, is that it is not.

I consider that there is clear and demonstrable evidence of harm which, when properly understood and weighed, outweighs the demonstrable need relied upon in support of the scheme. My objections therefore do not depend upon denying the need for renewable energy. They depend upon the proposition that an acknowledged national need does not remove the requirement to examine whether the environmental and community consequences of a particular development, in a particular place, are acceptable.

The submission is structured accordingly.

I make 7 separate objections, and the division between these objections is intentional. There is some necessary overlap between them, but I have sought to avoid repetition and to ensure that each objection asks a reasonably distinct question of the Examination. Together they form a sequence: beginning with the direct consequences of East Pye itself and then considering the wider consequences which may flow from the new transmission infrastructure that the DCO would facilitate.

Format adopted for the individual objections

Each of the seven individual objections follows a common format. The purpose is to separate the broad point being made from the detailed evidence supporting it, and to make clear both what I consider the Examination needs to address and where further information may be required from other organisations.

Each objection begins with a short non-technical context section, set in italics. This is intended to explain in straightforward terms what the objection is about and why I consider the issue matters, before moving into the more detailed planning, technical or evidential material.

This is followed by a section headed “What the Examination needs to cover”. That section identifies the principal matters which, in my view, the Examining Authority should examine in order to reach a properly informed conclusion on the particular objection.

From that follows a series of questions That I consider that the ExA should ask of relevant organisations. These are not intended to transfer responsibility for the Examination to consultees or other bodies. Their purpose is to identify information which those organisations may hold, or matters within their particular expertise or operational responsibility, which could assist the ExA in completing its own examination of the issue.

The formal objection then follows, together with the supporting evidence and analysis under the heading “Reasoned justification”. The intention is therefore that each objection can be read at two levels: first, as a relatively concise explanation of the issue and the questions which arise from it; and secondly, as the fuller evidential case explaining why I consider the objection to be made out.

Points of clarification

First, throughout this submission I have referred to the proposed grid connection as the “Great Moulton (Long Stratton) connection”. I recognise that this is not a formal title used by NESO, NGET or the scheme promoters. I have adopted it because, in my view, a description referring simply to Long Stratton is geographically misleading and tends to downplay the relationship of the proposed infrastructure to Great Moulton village and its surrounding countryside. I am also aware of parallel references to an “East Anglia Node A”. For the purposes of these submissions I have proceeded on the basis that there is a high probability that East Anglia Node A and the proposed Great Moulton connection are one and the same. If that is correct, the existence of parallel terminology itself creates a potential source of confusion which I consider the ExA should explore and resolve. If, however, the Examination establishes that two separate new grid connections are in fact planned between Norwich Main and Yaxley substations, I will reflect that position in a future iteration of my submission.

Second, Companion Document 7A to Objection 7, “The BESS Laid Plans – What Could Possibly Go Wrong? Systemic Regulatory Gaps in Fire and Hazard Safety Oversight of Grid-Scale Battery Energy Storage Systems”, is not a paper prepared specifically for the East Pye Examination. It is the same study that I prepared in August 2026 and circulated to the local Members of Parliament, Ben Goldsborough and Adrian Ramsay, to Norfolk Fire and Rescue Service and to South Norfolk Council, with the aim of encouraging wider consideration, including parliamentary debate, of what I regard as an issue of clear public concern. It is now submitted as a separate companion document to this Written Representation, rather than being physically incorporated within it.

Apart from routine acknowledgements and some encouraging words from South Norfolk Council’s Head of Planning, I have received no substantive response engaging with the contents of that study. I submit it separately as Companion Document 7A because the issues examined in it are directly relevant to Objection 7 and to the fire and hazard safety questions raised by the East Pye BESS. The August 2026 report provides the wider regulatory and evidential background; Objection 7 applies those matters specifically to East Pye. The two documents should therefore be read together. Hyperlinks contained in the August study have been removed solely to accord with the Examining Authority’s recently stated requirements for examination material; the substantive text has not otherwise been altered.

Third, in order to inform my understanding of the matters addressed in Objections 2 and 3, I made requests for environmental information under the Environmental Information Regulations 2004 to National Grid Electricity Transmission (NGET) on 18 August 2026 and to the National Energy System Operator (NESO) on 21 September 2026. The questions put to each organisation are set out in the body of this submission at the relevant point.

They were intended to establish, respectively, the extent of each organisation’s knowledge and understanding of the issues on which I wished to make representations. To date, 6 October 2026, I have received only initial acknowledgements of receipt from the organisations concerned. NGET subsequently advised that it would be unable to respond within the 20 working day period normally provided for by the Regulations. It is possible that there will be further substantial delay. I am also sanguine enough to recognise that a substantive response may never be received from either organisation. I believe that I have been able, so far as

reasonably possible, to work around the gaps in knowledge which those responses might have filled.

That should not, however, be taken to mean that the Examination should accept the same evidential position. The ExA is not constrained by the limitations encountered by an individual interested party seeking information through the EIR process. Where NGET or NESO holds information which is necessary to understand the matters raised in Objections 2 and 3, there is every reason for the ExA to require that information so that the Examination can be completed on a properly informed basis. I would very much hope that the Examining Authority would not regard a refusal, non-response or continuing delay by either body as an acceptable end point but would pursue the information it considers necessary for its examination.

This process of triage also means that I have not attempted to prepare detailed objections on every other matter potentially capable of weighing in the planning balance. For example, I have not sought to undertake a separate examination of agricultural land quality, soil loss, biodiversity, ecology, heritage, archaeology, hydrology, drainage or every other environmental topic addressed in the Environmental Statement.

Additionally as far as Objection 1 is concerned (the landscape, visual and construction impact arising from East Pye itself) I have specifically narrowed my objection to explore only those harms arising from the anticipated agglomeration of electrical infrastructure (grid substations, BESS, pylon diversions and associated works): I have not explored the impact and associated harms arising from the solar arrays and additional infrastructure located further afield, in or near villages such as Tharston, Hempnall, Saxlingham Nethergate or Woodton. This should in no way be construed as a sign that I regard the impact of East Pye Solar on those locations as insignificant. From what I have seen, read and heard, the impact on such villages will be considerable.

To make it crystal clear, any omissions should not be interpreted as agreement with the Applicant or as a conclusion that those effects are acceptable. It means only that, within the time available and having regard to the need to produce focused representations, I have chosen not to duplicate work which may properly be undertaken by the Examining Authority, statutory consultees, local authorities, other interested parties or their advisers.

Indeed, I fully recognise that some of the evidence and arguments contained in my submission may also have been identified independently by the Examining Authority. Nothing in my representations assumes otherwise. My purpose is not to suggest that the Examination would fail to identify these matters without my intervention, but to place before it an organised body of evidence and reasoning which I believe assists the examination of the application.

Equally, there may be other material harms which I have not identified or which I have deliberately chosen not to pursue. The planning balance is therefore not confined to the matters in my submission.

My invitation to the Examining Authority is consequently a limited but important one. I ask it to examine the evidence I have provided, together with the Applicant's evidence, the evidence of other interested parties and any other matters emerging through the Examination, and to

determine whether the acknowledged need for East Pye outweighs the environmental and community harms which would result from granting the DCO.

On the evidence I have examined, I consider that the balance falls the other way: the need is real and important, but in this particular case the demonstrable harm is greater.

That conclusion is not an objection to solar energy, to decarbonisation or to the principle of major renewable energy infrastructure. It is an objection to the proposition that this particular development, in this particular form and location, should be authorised notwithstanding the harms which the evidence shows it would create.

Postscript: Challenges posed by submission

Having read the final draft of this submission as a whole, I want to be unusually frank about some obvious challenges.

Length

This first is its length. I recognise that this is a substantial Written Representation and that reading it places an additional burden on the Examining Authority. I apologise for that. I have tried to avoid repetition and to confine the submission to matters which I consider material to the Examination.

There is, however, a reason for its length. East Pye is, in my view, unusually complex for a solar DCO. It is not simply a large solar array. It combines extensive generation with a major concentration of permanent electrical infrastructure at Great Moulton: a new 400 kV National Grid connection, project substations, a large BESS, transformers, cable and overhead-line works, pylon alterations and associated access, security and mitigation. Those elements have significant effects in their own right. More importantly, the new transmission infrastructure may have consequences extending well beyond East Pye itself.

That is central to my case. My proposition is that establishing a new 400 kV connection at Great Moulton could alter the practical geography of renewable energy development in this part of South Norfolk by creating a connection opportunity capable of attracting or facilitating further generation, storage and associated infrastructure. I do not say that this outcome is inevitable. I say that it is sufficiently credible to require testing through the Examination.

Testing out this proposition has necessarily taken space. I wanted first to understand what has happened elsewhere when substantial new grid capacity or a new transmission connection has been established, rather than simply assert that further development might follow. I have therefore cited evidence from other locations to test whether new grid capacity can act as an enabling or clustering influence. I have also tried to establish what projects may already exist which could seek to use the proposed Great Moulton connection. That has required piecing together planning records, NESO information, developer material and differing references to Great Moulton, Long Stratton and East Anglia Node A, while being explicit about what is established, what is inferred and what remains uncertain.

The result is a submission which is longer than I would have preferred, but its core method is simple: state a proposition, test it against the evidence presently available, identify the gaps, and ask the ExA to obtain and test the information which I have been unable to secure. The progression from East Pye itself to proliferation, cumulative effects, industrialisation and the wider Norwich Main-Great Moulton-Yaxley pattern follows from that central question. If the Great Moulton connection is genuinely no more than a finite facility for East Pye, some of those concerns fall away. If it is capable of becoming a significant new transmission node serving further projects, they do not.

I therefore regret the burden created by the length of the submission, but I hope the Examining Authority will see it as the consequence of trying to test a potentially important proposition with evidence, rather than leave it as assertion.

Asking the ExA to explore further than it might be willing to do

The second challenge is that I am asking the ExA to look further than it may ordinarily feel comfortable doing. That is not because I wish to widen the Examination unnecessarily. It follows directly from the proposition I am asking to be tested. If a new 400 kV connection at Great Moulton could facilitate further renewable energy and storage development, the Examination needs some understanding of what those potential projects are and how credible that development pathway may be.

Obtaining that picture has proved surprisingly difficult. There are identifiable projects on the NESO registers, but the public entries provide only part of the picture. NESO will almost certainly hold more information about projects and connection assumptions than appears on the published TEC Register, while there is likely to have been substantial dialogue between NGET and existing or prospective connection customers. Very little of that material is in the public domain. I have therefore been trying to test an important proposition without access to much of the evidence best capable of confirming or disproving it – a task being made more difficult by the silence, to date, of both NESO and NGET in respect of the questions I have posed to these organisations.

I understand why the ExA might be reluctant to pursue matters which appear to extend beyond the immediate DCO application or to investigate projects which remain uncertain. Nevertheless, I consider that it is essential here. The issue is not whether every possible future project should be examined as though it were certain to proceed. It is whether the permanent grid infrastructure authorised through East Pye could reasonably be expected to enable a wider pattern of development. That cannot be tested properly if relevant information held by NESO, NGET or prospective connectors remains outside the Examination.

In preparing this submission I have sometimes felt that I have been working with one hand behind my back. I have tried to distinguish carefully between fact, inference and speculation, but the limitations of the public evidence have not always allowed the precision I would have preferred. I can only apologise where that has resulted in qualification or uncertainty. I am not asking the ExA to accept my assumptions. I am asking it to use its position to obtain the evidence needed to test them properly.

Reliance on hypotheses which need to be tested

The third challenge concerns the degree to which parts of my case depend upon hypotheses which the Examination itself needs to test. Objections 1 and 7, which effectively bookend the submission, are in my view on relatively firm ground. They deal principally with the direct landscape, construction and infrastructure effects of East Pye, and with the fire and hazard implications of the BESS. Objections 2 to 6 necessarily move into less certain territory. They

depend progressively more upon inference, emerging evidence and the testing of credible future scenarios.

I recognise the possible criticism. Read sequentially, those objections move progressively further away from the immediate question of the effects of East Pye within its Order limits. The proposed Great Moulton connection leads to questions about what that infrastructure may enable; those questions lead in turn to possible clustering, cumulative and in-combination effects, industrialisation of the countryside and the wider Norwich Main-Great Moulton-Yaxley pattern. Some of those outcomes are uncertain and may never occur in the form I have explored.

I do not think that makes the later objections irrelevant. Their relevance arises precisely because East Pye would authorise permanent strategic electricity infrastructure which would remain after the solar project itself and could materially alter the opportunity for further development. The Examination is therefore not being asked to determine hypothetical future applications. It is being asked to consider whether a reasonably foreseeable consequence of the infrastructure authorised now is to facilitate a wider pattern of development, and, if so, whether that consequence matters to the decision on East Pye.

That distinction is important. I am not asking the ExA to accept each scenario as a prediction. I am asking it to test the hypotheses against the evidence available to it, to reject those which are not credible and to give appropriate weight to those which are. In my view, uncertainty is a reason for careful examination, not a reason to exclude the issue altogether.

Why expressing some concepts in non-planning terms is, I consider, acceptable

The fourth and final challenge is one of language. I have used expressions such as “Energy Hub”, “industrialisation of the countryside” and “Energy Corridor”. I recognise that these are not statutory planning terms and that none constitutes a policy test in its own right. I use them because they describe, in ordinary language, effects which many people are likely to recognise and experience. The fact that planning legislation or national policy does not attach a particular label to an effect does not make the effect itself irrelevant.

In my view, the concepts are in fact already present within planning policy, albeit expressed through their constituent parts. EN-1 requires assessment of direct, indirect and cumulative effects, recognises that energy infrastructure must be sensitive to place, and requires consideration of landscape character, visual amenity and the nature and magnitude of change. EN-3 goes further in the particular context of solar development: it expressly recognises that sites may be chosen because of nearby grid export capacity and requires the cumulative effects of locating solar farms close to other generating stations and energy infrastructure to be considered. It also requires consideration of cumulative effects on landscape character. The NPPF similarly requires attention to landscape character and the natural beauty of the countryside while giving substantial weight to renewable-energy and electricity-network infrastructure.

What policy does not necessarily do is provide a single expression for the combined spatial consequence when these effects accumulate. A place may remain physically rural while repeated substations, BESS compounds, pylons, solar arrays, fencing, access works and associated infrastructure progressively change what that countryside looks like, how it functions and how it is experienced. “Industrialisation of the countryside” is my shorthand for that possibility. “Energy Hub” describes the potential clustering of functionally related energy development around a new connection point. “Energy Corridor” describes the possibility of a broader concentration of such infrastructure along the Norwich Main-Great Moulton-Yaxley axis.

I therefore do not ask the ExA to treat those expressions as policy terminology. I ask it to look through the labels to the planning effects they are intended to describe. National policy inevitably deals in categories; lived experience does not. If several recognised planning effects combine to produce a broader change in the character, function or perception of an area, the absence of a convenient statutory phrase for that combined effect should not prevent the Examination from considering it. The terminology is mine; the underlying issues are firmly planning matters.

About Me

I am a retired Town Planner with approximately 45 years' professional experience in land-use planning. I hold a degree in Urban and Regional Planning and was a member of the Royal Town Planning Institute for many years. My career has covered a wide range of planning activities and has given me experience of the planning system from several different perspectives.

Earlier in my career, my focus was on regeneration and development planning, together with work supporting the preparation of Local Plans and, when those tiers of planning were in place, Regional and Structure Plans. I have therefore had considerable experience of the plan-making process and of the relationship between strategic planning, individual development proposals and the longer term consequences of land use decisions.

I have also worked on the promotion of large scale development proposals. That experience has given me an understanding of the process from the developer and promoter perspective: the identification and assessment of sites, the assembling of evidence, the preparation of planning cases and the need to reconcile development objectives with environmental, infrastructure and community constraints.

In the latter part of my career, a substantial part of my work involved advising local authorities on infrastructure need and infrastructure planning, together with masterplanning and the preparation of development and site briefs. Much of this work was undertaken in the Home Counties and East Midlands and involved considering how substantial new development should be planned spatially, how its infrastructure requirements should be identified and provided for, and how individual developments fitted within a wider strategic framework.

Over the years I have also appeared as an Expert Witness, principally in support of local authorities in connection with their plan-making functions. I mention this background not to suggest that my views should be afforded any particular status simply because of my professional experience, but to explain the perspective from which I have approached the East Pye application. My representations reflect a longstanding professional interest in how major development, infrastructure provision, landscape and communities interact, and in the importance of considering the wider and longer term consequences of planning decisions rather than individual proposals solely in isolation.

I am now retired and make these representations in a personal capacity. I have prepared them independently. They are not commissioned professional advice, and I do not seek to present myself as having specialist expertise in every technical subject touched upon in the submission. Where matters extend beyond my own professional expertise, I have sought to distinguish between established evidence, planning judgement and matters which are necessarily more speculative.

I am also a resident of Great Moulton and therefore have a direct personal interest in the consequences of the East Pye proposals for the area in which I live. I have, however, sought throughout these representations to approach the application principally from a professional planning perspective rather than an emotional one. That does not mean that I am unaffected by the potential consequences of the development, but I have tried to ensure that my objections are grounded in evidence, planning policy, spatial analysis and reasoned planning judgement, and that matters of local concern are expressed in those terms for the assistance of the Examining Authority.

I should also acknowledge a more practical limitation of the material I have submitted. My graphic and cartographic skills are extremely limited and, in preparing these representations, it has not been possible for me to draw upon professional graphic design or GIS support. I therefore apologise to the Examining Authority for the sometimes rudimentary quality of the plans, diagrams and other graphics which accompany my objections. They should not be regarded as professionally prepared technical drawings.

I have nevertheless considered it important to attempt to express a number of my concerns spatially. Several of the issues raised in my objections - particularly those concerning the relationship between the proposed Great Moulton infrastructure, other existing and potential energy developments, cumulative effects and the wider pattern of development - are difficult to convey adequately through words alone. I hope that, notwithstanding their graphical limitations, the plans and diagrams are sufficiently clear to assist the Examining Authority in understanding the spatial relationships and the planning arguments I am seeking to make.

Use of Artificial Intelligence in Preparing this Submission

I have made extensive use of Artificial Intelligence (AI) in preparing these representations. I consider it appropriate to be open about that use, both because of the extent to which AI has assisted my research and because it is important that the Examining Authority understands what role it has, and has not, played in the preparation of my objections.

The volume of documentation submitted in support of the East Pye DCO is very substantial. For an individual Interested Party seeking to prepare a personal representation, within the time available under the Examination timetable, it is simply not practicable to read, absorb and cross-reference every potentially relevant application document, consultation response, policy document, technical appendix, other infrastructure proposal and external source which may have a bearing upon the issues being raised.

I have therefore used AI extensively as a research assistant. Its principal role has been to help identify relevant documents and passages, interrogate lengthy material, draw together information from different sources, identify matters requiring further investigation, compare evidence and policy, and assist in organising a very substantial body of information into a form which can reasonably be considered within the limited time available.

AI has also been useful in testing lines of enquiry. In a number of areas it has helped me identify questions which I have then pursued further through original documents, planning records, policy sources, consultation material and other evidence. In that sense, it has considerably increased the amount of material which it has been possible for me, as an individual objector, to examine.

Two areas of research have proved particularly difficult. The first is the NESO TEC Register, an arcane document to interrogate and certainly not a public-facing register. Although it was clearly not designed with that purpose in mind, one could be forgiven for thinking that one of its effects is to sow the seeds of confusion amongst local communities. It remains perplexing that there is no simple, readily understandable public register of renewable energy and associated grid projects which can be viewed and understood by professional and non-professional users alike.

The second, and equally valid, difficulty is establishing the development history of grid-scale substations, a task I undertake in Objection 2 and even then, only by reference to a selective number of examples. In both cases I have had to rely heavily upon AI for data gathering and initial interrogation; without that assistance, this part of my submission would not realistically have been written. I again apologise for any mistakes which may remain, although I consider that some responsibility lies with the relevant agencies, which could and should have made this information more readily available to the public.

It is important, however, to distinguish that research function from the substance of my objection. The seven principal themes which collectively constitute my submission are entirely mine. They reflect the matters which I have identified as significant, the questions which I consider the Examination should address and the conclusions which I have reached. AI has assisted me in researching, testing, organising and expressing those arguments; it has not determined which objections I should make or what position I should take on the East Pye proposal. Above all, it has not coloured my view.

I have sought to cross-check important factual propositions rigorously, particularly where they are central to an objection. Wherever possible I have returned to primary material, including the DCO application documents, planning records, policy documents, consultation responses and other identifiable sources, rather than relying simply upon an AI-generated answer.

I nevertheless recognise that the use of AI does not eliminate the possibility of error. AI can misunderstand material, overlook qualifications, conflate similarly named projects or sources, and occasionally generate information which proves on examination to be inaccurate. Despite the checking I have undertaken, it is therefore possible that errors remain within a submission of this scale.

That limitation should, however, be placed in context. The possibility of factual or interpretative error is not peculiar to AI-assisted representations. A lengthy objection prepared entirely through conventional research can equally contain mistakes, misunderstand documents or overlook relevant material. The appropriate safeguard in either case is the same: important propositions should be capable of being tested against the underlying evidence.

I have therefore sought, so far as practicable, to make the evidential basis of my objections transparent and to distinguish between matters which are established by evidence, matters involving professional planning judgement, and matters which I have expressly identified as speculative or requiring clarification during the Examination.

I take full responsibility for the representations submitted in my name. The use of AI has enabled me to undertake a breadth of research which would otherwise have been extremely difficult for an individual participant within the available timescale, but the selection of issues, the planning arguments advanced and the conclusions drawn remain my own.

Objection 1 – Significant Landscape, Visual and Construction Harms Outweighing Need

Context

This objection advances a deliberately focused case. Even if East Pye is considered only on the basis of its own landscape and visual effects, the major electrical infrastructure at Great Moulton, the resilience and limitations of the proposed landscape mitigation, and the construction, access and highway consequences required to build the scheme, the resulting harms are in my assessment sufficiently substantial to outweigh the acknowledged need for renewable generation and associated infrastructure. Objections 2–7 identify further harms and uncertainties, but they are not required in order for Objection 1 to stand.

What the Examination needs to cover

I respectfully suggest that the Examination should cover:

- the landscape and visual effects of East Pye as one integrated development, rather than as a series of separate solar, BESS, substation, cable, pylon and access components;
- the scale, duration, geographical spread and residual significance of adverse landscape and visual effects at construction, Year 1, Year 15 and in winter conditions;
- the combined physical and elevational character of the Great Moulton Electrical Transmission Complex Core, including the permanent NGET 400 kV substation, the East Pye 400 kV Project Substations, BESS, transformers, reactive-power equipment, cable sealing ends, overhead-line turn-in and pylon works, security, lighting, drainage and access;
- whether the maximum parameters and illustrative material describe the same realistic worst case, particularly while NGET configuration, micro-siting and orientation remain capable of detailed change;
- whether every assessment and visualisation consistently includes the full number and maximum form of the 400 kV Project Substations authorised or sought by the application;
- the visual and landscape implications of outdoor air-insulated switchgear, major transformers, reactive-power technology, cable sealing ends, control buildings, fencing, CCTV, lighting, internal roads, hardstanding and overhead-line works, rather than merely the maximum height of selected structures;
- the extent to which planting, bunds, woodland belts or other mitigation would themselves alter local landscape character and whether taller electrical infrastructure would remain visible above or through that mitigation;
- the construction programme as experienced by residents, road users, walkers, riders and businesses, including HGV movements, abnormal loads, temporary compounds, haul routes, cable works, road works, accesses and vegetation removal;
- which construction effects are genuinely temporary, and which would leave a permanent or long-lasting legacy in widened accesses, passing places, altered verges, hedge loss, engineered road geometry or other changes to quiet rural lanes;

- whether landscape, noise, transport, drainage, fire/safety and construction assessments are all based upon the same transformer, electrical equipment and connection worst case;
- whether the direct landscape, visual and construction harms of East Pye, taken alone and after realistic mitigation, outweigh the acknowledged national need and benefits relied upon by the Applicant; and
- only after that first-stage balance has been undertaken, the additional harms and uncertainties raised in Objections 2–7.

Questions to relevant organisations

I respectfully suggest that the following questions should be asked of the relevant organisations so that the Examining Authority can form a properly evidenced view:

- **Applicant** — How many 400 kV Project Substations are authorised, required and included in each assessment and visualisation?
- **Applicant** — Can one plan show the maximum aggregate footprint of the Great Moulton Electrical Transmission Complex Core, including all permanent compounds, access, pylons, conductors, cable terminations, fencing, lighting, drainage and mitigation?
- **Applicant** — Do the submitted elevations and photomontages show the 6 ha NGET substation, the two East Pye Project Substations within the Complex Core, BESS, transformers and overhead-line works together?
- **Applicant** — What is the maximum number, size, rating, oil inventory, operating mass, transport mass and sound-power level of the transformers and reactors within the Complex Core?
- **Applicant** — Which reactive-power technologies may be installed, and which physical, landscape and acoustic option forms the assessed worst case?
- **Applicant** — Which single- or double-turn-in configuration forms the visual and construction worst case, and is that same case used consistently in the Environmental Statement and visual material?
- **Applicant** — Which elements shown on the Indicative Masterplan are secured and which may change through NGET detailed design?
- **Applicant** — Are Year 1, Year 15 and winter visualisations available from Great Moulton, Wacton, nearby residences, quiet lanes and public rights of way?
- **Applicant** — How is landscape mitigation maintained for the permanent NGET substation after East Pye is decommissioned?
- **Applicant** — Has the change in landscape character arising from the Complex Core been assessed as a whole, including the combined and sequential experience of the BESS, substations and overhead-line works?
- **Applicant** — What is the maximum number and location of 400 kV cable sealing ends and terminal structures, and where are they shown in the elevations and photomontages?
- **Applicant** — How has the assessment accounted for the visual character of outdoor AIS as a repeated field of steelwork, insulators, conductors and busbars rather than a single height parameter?

- **Applicant** — Where bunding, woodland belts or engineered landform are proposed, has the assessment considered whether the mitigation itself would be uncharacteristic or visually intrusive?
- **Applicant** — Can the construction programme be presented spatially and temporally so communities can understand when HGV traffic, abnormal loads, temporary compounds, haul routes, road works, cable works and access alterations would occur and for how long?
- **Applicant** — Which highway and access interventions would remain after construction, and how have those residual changes been included in the landscape and amenity assessment?
- **NGET** — Does the maximum envelope assessed by the Applicant fully accommodate NGET's reasonably foreseeable detailed design for the permanent substation and overhead-line turn-in works?
- **NGET** — Which elements of substation layout, orientation, bay arrangement, reactive-power equipment, control buildings, access, security and pylon works remain subject to detailed design change, and what is the maximum physical form that could still be delivered?
- **NGET** — How will landscape mitigation for the permanent NGET substation be secured, maintained and renewed after East Pye's generating and storage infrastructure reaches the end of its operational life?
- **Norfolk County Council as Highway Authority** — Does the construction traffic and access strategy adequately distinguish temporary measures from permanent changes to rural roads, verges, hedges, junctions and passing arrangements, and are those permanent changes environmentally assessed?
- **South Norfolk Council** — Does the Council consider that the combined landscape character effects of extensive solar development, major 400 kV infrastructure and construction-related alteration of the rural road network have been assessed as an integrated place-based change rather than separate technical topics?
- **Applicant** — What mortality, replacement and reduced-growth assumptions are incorporated into the Year-15 photomontages and landscape assessment?
- **Applicant** — Do the Year-15 visualisations assume uniform establishment; if so, can sensitivity tests be provided for 10%, 20% and 30% loss, uneven replacement growth and winter leaf-off?
- **Applicant** — What minimum effective screening height and density at Year 15 is secured by the DCO/LEMP rather than merely illustrated or anticipated?
- **Applicant** — What watering and replacement obligations are secured during drought and for how many years after initial and replacement planting?
- **Applicant** — For Great Moulton RB18/FP15 and the south-eastern edge of the village, what proportion of the 13 m Project Substation, 15 m NGET substation and 53–61 m overhead-line infrastructure is expected to remain visible at Year 15 in winter?
- **Applicant** — Can the assessment distinguish clearly between screening lower electrical equipment and screening the Great Moulton Electrical Transmission Complex Core as a whole?

Formal Objection 1

I object to the East Pye Solar DCO because the scale, geographical spread, duration and permanence of the landscape and visual effects of the authorised development, together with the limited ability of planting to screen major 400 kV infrastructure and the disruption and lasting effects associated with construction access, traffic and highway works, would cause substantial adverse harm. In my assessment those harms, considered on their own and before the additional matters raised in Objections 2–7 are added, significantly outweigh the acknowledged need and benefits relied upon in support of the scheme.

Reasoned justification

1.1 Scope of this objection and deliberate triage

- 1.1.1** This Objection 1 is deliberately confined. As will be explained in the introductory “About this objection” section, I have triaged the matters on which I propose to make detailed representations so that each objection has a defined purpose, avoids unnecessary repetition and can be examined on its own evidence.
- 1.1.2** The fact that a topic is not pursued in Objection 1 is not an acceptance that the Applicant has assessed it adequately or that I consider its effects acceptable. I do not, for example, advance here a separate objection on agricultural land, soils, biodiversity, ecology, heritage, drainage or flood risk. Their omission reflects proportionate triage, not concession, and evidence on any of those matters may reveal further material or unacceptable harm.
- 1.1.3** Within that deliberate limit, Objection 1 addresses two connected sets of effects: first, the landscape and visual harm caused by East Pye itself, including its solar and major electrical infrastructure; and secondly, the construction, access and highway consequences required to deliver the scheme. These are principal ways in which the development would be experienced by local communities and by people moving through the affected countryside.
- 1.1.4** The objection is not based on denying the national need for renewable electricity generation, storage and network infrastructure. That need is acknowledged. The issue is whether it is sufficient to justify this particular scheme, in this particular landscape, with these particular direct and construction consequences.

1.2 Introduction and Context in relation to Other Objections (Objections 2 - 7)

- 1.2.1** The sequencing of my objections is deliberate. Objection 1 asks whether the direct landscape, visual and construction consequences of East Pye are sufficient, by themselves, to tip the planning balance against the proposal. In my assessment they are.
- 1.2.2** Objection 2 considers the separate enabling issue of whether the DCO would establish a new permanent and potentially expandable 400 kV NGET node at Great Moulton and whether its configuration, capacity, permanence and network role may facilitate later electricity generation, storage, demand or network connections.
- 1.2.3** Objection 3 considers the credible projects and connection possibilities which may seek to use, depend upon or be facilitated by the Great Moulton connection, testing

whether the proliferation risk identified in Objection 2 could translate into a de facto Great Moulton Energy Hub.

- 1.2.4** Objection 4 considers the cumulative and in-combination effects which such a hub could create. Objection 5 addresses the related possibility that the concentration and repetition of electricity infrastructure would amount to an effective industrialisation of this part of the South Norfolk countryside. Objection 6 considers whether Great Moulton, with Norwich Main to the north and Yaxley to the south, would contribute to a wider Norwich Main–Great Moulton–Yaxley Energy Corridor.
- 1.2.5** Objection 7 addresses the distinct fire and hazard safety implications of incorporating a very large BESS within connected high-voltage infrastructure. That objection is capable of applying more widely to renewable-energy projects incorporating BESS, but it is directly relevant to the East Pye storage component.
- 1.2.6** Those later objections are substantive in their own right and also identify additional harms capable of weighing against the DCO. Objection 1 does not depend upon them. The Examining Authority could reject my wider hub, corridor or BESS arguments and would still need to decide whether East Pye’s own landscape and construction harms outweigh the benefits claimed for it.

1.3 The landscape change is much more than the presence of solar panels

- 1.3.1** East Pye is a dispersed but extensive energy development. Its landscape effects arise not only from solar arrays but from fencing, tracks, inverter and transformer equipment, substations, battery storage, high-voltage cable works, security infrastructure, drainage, access works and the grid connection. The landscape judgment must therefore be based on the whole authorised development as it would be experienced, not upon a simplified description of low-profile solar panels.
- 1.3.2** This is particularly important at Great Moulton, where a concentrated group of major electrical works would be introduced into a predominantly rural landscape. I use the analytical term “Great Moulton Electrical Transmission Complex Core” for this fixed concentration. It is not an Applicant, NGET or NESO project name. “Great Moulton” identifies the community and landscape; “Electrical Transmission” reflects the dominant 400 kV function; “Complex” recognises the several interdependent compounds and linear works; and “Core” distinguishes this immediate fixed concentration from the wider prospective energy hub and energy corridor considered in later objections.
- 1.3.3** The Complex Core comprises the permanent NGET 400 kV substation, the East Pye 400 kV Project Substations at Site 1 and the BESS site, the BESS itself, transformers, reactive-power equipment, cable sealing ends and other termination equipment, overhead-line turn-in and pylon works, high-voltage cabling, access, fencing, security, lighting, drainage and associated infrastructure.
- 1.3.4** The controlled parameters allow a substantial concentration. The NGET AIS compound may occupy up to 6 hectares with busbars up to 15 m high; the BESS-site Project Substation up to 3 hectares; the Site 1 Project Substation up to 1.1 hectares; and the BESS up to 6.5 hectares. The two Project Substations may include structures up to 13

m high. These figures exclude overhead-line works, permanent access, construction land and landscape mitigation.

- 1.3.5** The combined maximum compound area of the NGET substation, the two Project Substations and the BESS could therefore approach 16.6 hectares. Using a 105 m × 68 m full-size football playing area only as an illustrative scale comparison, this is approximately 23.2 pitches, before overhead-line and pylon works, access, cable corridors, drainage, mitigation areas and temporary construction land are added.
- 1.3.6** The transmission works also allow new or repositioned 400 kV pylons up to approximately 61 m high. Those structures, redirected conductors, terminal arrangements and substation gantries are materially different in scale and visual character from hedgerows, tree belts or the low built form normally associated with the local countryside.
- 1.3.7** Appendix A1 reproduces the full evidential basis for the Complex Core landscape case, including the Applicant's masterplan, parameter schedules, equipment-specific analysis, four real-world typological comparators, assessment weaknesses, examination-evidence schedule, questions and source schedule.

1.4 The Great Moulton Complex Core must be assessed as one landscape composition

- 1.4.1** East Pye proposes outdoor air-insulated switchgear rather than a compact building containing gas-insulated switchgear. A typical AIS elevation comprises ranks of equipment at different heights: plinths and control cabinets close to ground level; circuit breakers and disconnectors above them; tall insulator stacks and supports; and busbars and terminal gantries at the upper level.
- 1.4.2** The principal landscape effect is not captured by a single height figure. AIS is visually permeable but repeated across a large area. Its industrial character is created by breadth, repetition, geometry and technical complexity. A 15 m busbar is approximately five times the height of a 3 m security fence and broadly comparable with a four- or five-storey building, albeit more open in structure.
- 1.4.3** Major transformers add solid visual mass. They commonly incorporate a central tank, cooling radiators and fans, high-voltage bushings, conservator vessels, pipework, monitoring equipment and oil containment. They also bear directly upon noise, drainage, fire and oil risk, abnormal-load transport and replacement access.
- 1.4.4** The application does not appear to assemble in one authoritative schedule the maximum number, location, dimensions, rating, operating mass, transport mass, oil inventory and sound-power level of every major transformer within the Complex Core. Without that common schedule it is difficult to confirm that landscape visualisations, noise modelling, traffic assessment, drainage and safety assessment all use the same transformer worst case.
- 1.4.5** A utility-scale BESS derives visual effect from repeated rows of battery enclosures, access aisles, conversion units, transformers, switchgear, lighting, fencing and engineered surfacing. The East Pye BESS could extend to 6.5 hectares and adjoin a separate 400 kV Project Substation of up to 3 hectares.

- 1.4.6** Cable connections also have above-ground expression. Where a 400 kV underground circuit terminates, each phase rises through a substantial outdoor termination. A three-phase circuit ordinarily creates at least three tall termination units with support steelwork, surge arresters, bonding equipment, conductors, access and security fencing. The maximum number and location of sealing ends and terminal structures should be identified and shown on the elevations.
- 1.4.7** Reactive-power equipment is material because the permitted technology may alter appearance, noise, oil inventory, cooling requirements and footprint. Shunt reactors, capacitor banks, STATCOM equipment and harmonic-filter compounds are not visually interchangeable. The permitted maximum option must be identified and assessed.
- 1.4.8** The overhead-line connection is itself a major part of the elevation. East Pye allows existing pylons to be removed or relocated, new and temporary pylons to be installed, conductors to be restrung and either a single or double turn-in to be constructed. A double turn-in may introduce terminal or angle towers, redirected conductors, earth wires and a concentrated relationship between the overhead line and substation gantries.
- 1.4.9** The Grid Connection Statement records that the double turn-in is preferred while retaining a single-turn-in option. The Applicant should demonstrate which option is the environmental worst case for each viewpoint rather than assuming a generic overhead-line envelope covers both.
- 1.4.10** Relay rooms and control buildings, although comparatively low, add solid building mass. Palisade fencing, CCTV poles, secure gates, warning signage and lighting reinforce industrial character. The NGET internal access road may be up to 8 m wide; hardstanding, crane areas, transformer bases, drainage channels and oil-containment structures further enlarge the engineered land take.
- 1.4.11** Residents and landscape receptors will not experience these as separate DCO work numbers. They will experience simultaneous and sequential views of connected infrastructure. The assessment must therefore show what can be seen together from Great Moulton, Wacton, nearby residences, equestrian and business receptors, quiet lanes and public rights of way.
- 1.4.12** The permanence of the NGET substation is especially important. East Pye's generating, storage and project-substation infrastructure is proposed for a finite operational period whereas the NGET transmission asset is intended to remain. Landscape assessment and mitigation commitments must address that longer-term condition.
- 1.5 The maximum envelope and submitted visual evidence require particular scrutiny**
- 1.5.1** The DCO does not approve one final equipment layout. It authorises maximum parameters within a Rochdale envelope. That can be legitimate only if the Environmental Statement assesses a cautious realistic worst case and the DCO controls prevent a materially worse design from emerging later.
- 1.5.2** The Grid Connection Statement indicates that NGET configuration, micro-siting and orientation continue to be discussed and that indicative material may be revised. The maximum parameters, not the most attractive features of an indicative arrangement, must therefore control the assessment.

- 1.5.3** There is also a documented inconsistency over the number of 400 kV Project Substations. The Scoping Report described two, whereas ES Chapter 4 and other application documents seek up to three. The Planning Inspectorate required consistency and accuracy across the application and draft DCO. The Examination should establish whether every visualisation includes the full configuration now sought and whether consultation addressed it.
- 1.5.4** Separate BESS, Site 1 and cable-route visualisations do not necessarily provide a combined view of the Complex Core. The assessment should establish what would be visible simultaneously and sequentially rather than allowing the physical concentration to be fragmented between technical chapters or work packages.
- 1.5.5** A consolidated maximum-envelope plan and component schedule is therefore necessary. It should reconcile the Works Plan, draft DCO, APP/7.18, engineering information, landscape visualisations, noise model, traffic assessment and management plans.
- 1.5.6** Verified elevations should include at least four directions: north towards Great Moulton; east or south-east towards the BESS and Project Substation grouping; south towards Wacton and the local lane network; and west showing the relationship with the existing overhead line. Viewpoint-specific photomontages should place those elevations within actual landform and vegetation.
- 1.6 Mitigation does not erase the landscape harm**
- 1.6.1** Landscape mitigation can reduce some views over time, but it is mitigation rather than avoidance. The distinction matters particularly at Great Moulton because the proposed infrastructure spans very different scales: low BESS equipment may eventually be filtered or screened, whereas the upper parts of 13–15 m 400 kV substation architecture and the much taller overhead-line towers and conductors cannot realistically be made to disappear behind native boundary planting.
- 1.6.2** The Applicant's Year-15 case should therefore not be read as though it represents the removal of the landscape effect. The relevant question is what remains visible, how the altered landscape is experienced, and what assumptions about growth, density, mortality, replacement and seasonal foliage are embedded in the visualisations. Completion, Year 1, Year 15 and winter conditions should be distinguished clearly.
- 1.6.3** There is also a qualitative landscape consequence. A dense belt of planting or engineered landform can reduce visibility of lower equipment while replacing an open rural outlook with a more enclosed and artificial edge. In that situation the visual effect changes in form rather than simply disappearing. This is particularly important on public rights of way and quiet rural lanes where openness, field pattern, hedgerows and long views contribute to character and recreational experience.
- 1.6.4** Planting effectiveness is also constrained by the operational requirements of high-voltage infrastructure. Security stand-offs, visibility splays, drainage, underground and overhead services, conductors, internal roads and maintenance corridors can limit where trees and shrubs may be planted and how continuous the screen can become. The Examination should therefore test the actually plantable and maintainable landscape envelope rather than an idealised uninterrupted belt.

- 1.6.5** For the permanent NGET substation, landscape mitigation must be secured, managed and renewed for the lifetime of the transmission asset, including the period after East Pye's generating and storage infrastructure has been decommissioned. Otherwise, the long-term landscape case depends upon mitigation whose legal, practical and financial durability may be shorter than the infrastructure it is intended to soften.
- 1.6.6** A physical height comparison demonstrates the limit of the mitigation strategy. A successfully established Year-15 native belt with an effective screening height in the order of 5–8 m could substantially screen equipment in the 3.5–4.5 m range but would leave material parts of 13–15 m AIS compounds projecting above the canopy. On a relatively favourable 8 m screening assumption, about 5 m of a 13 m Project Substation envelope and 7 m of a 15 m National Grid Substation envelope would still stand above the screening height.
- 1.6.7** The disparity is much greater for overhead-line infrastructure. Towers in the approximate 53–61 m range would remain overwhelmingly above any plausible native boundary planting. On the same 8 m illustrative screening assumption, about 45 m of a 53 m tower and 53 m of a 61 m tower would remain above the screening height. Planting can therefore filter the lower foreground but cannot screen the tall-grid component of the Great Moulton Electrical Transmission Complex Core.
- 1.6.8** The Year-15 planting condition should not be treated as certain. New planting is exposed to mortality, browsing, weed competition, soil conditions and drought. A reasonable sensitivity test is approximately 5–10% loss under good establishment and intensive maintenance, 10–20% as a credible normal-risk range, 20–30% in poor establishment or dry summers, and 25–40% or more locally following a severe drought or heat event in the first growing seasons. These are sensitivity ranges rather than predicted East Pye mortality rates, but they show why a uniform mature screen should not be assumed.
- 1.6.9** Replacement planting does not immediately restore the assumed screening timetable. Stock replaced one, two or three winters later will be correspondingly behind surviving planting, producing variations in height, density and permeability. Winter leaf-off further reduces the effectiveness of deciduous mitigation. The proper worst-case test is therefore not simply whether failed planting will be replaced, but whether the height, density and continuity assumed in the Year-15 assessment will actually be achieved and maintained.
- 1.6.10** Climate resilience reinforces that concern. Hotter, drier summers and increased soil-moisture deficit are material risks for young planting in eastern England. The Examination should identify the watering, replacement and aftercare obligations secured by the DCO and LEMP, how long those obligations endure after each replacement episode, and whether the visual assessment has tested delayed or uneven establishment rather than assuming a single successful growth trajectory.

1.6.11 The consequence for the planning assessment is important. Where the Applicant relies upon landscape planting to reduce the magnitude or significance of an effect between completion and Year 15, the reduction should be given only the weight justified by a secured and resilient establishment case. Significant residual effects which persist at Year 15 cannot be discounted merely because some lower equipment becomes less visible.

1.6.12 For Great Moulton in particular, the Examination should distinguish between screening individual pieces of low equipment and screening the electrical complex as a whole. The latter includes the two East Pye 400 kV Project Substations, the NGET 400 kV substation, transformers, busbars, gantries, insulators, cable terminations, BESS and overhead-line works. The combined composition remains a major engineered intervention even where planting performs well.

1.7 Construction is a separate and substantial harm

1.7.1 Construction adds a separate layer of harm which should not be discounted merely because it is time limited. The scheme would require sustained movements of HGVs and other construction vehicles, abnormal-load deliveries, temporary compounds, haul routes, road works, cable works, access creation, drainage works and vegetation removal across a rural highway network and countryside setting not designed for development at this scale.

1.7.2 A construction period measured in years is not a fleeting inconvenience. For residents and users of affected lanes it can amount to a prolonged change in tranquility, road conditions, visual amenity, perceived safety and the day-to-day experience of moving through the countryside.

1.7.3 Construction traffic and landscape harm interact. Heavy vehicles and abnormal loads can require widened bellmouths, strengthened verges, visibility improvements, passing places, hedge removal, tree works and changes to road geometry. Those interventions can alter precisely the narrow, enclosed and vegetated rural character which gives local lanes their distinctiveness.

1.7.4 The Examination should separate works which will genuinely disappear after construction from those which remain permanently or semi-permanently. The latter become part of the operational landscape and amenity baseline created by the DCO.

1.7.5 Construction of the Complex Core adds particular demands. Large transformers, switchgear and transmission equipment require heavy-load access, craneage, hardstanding and assembly space. The landscape assessment, transport assessment and construction plans should describe the same equipment worst case so the highway consequences of delivering the authorised electrical infrastructure are not understated.

1.8 The planning balance on Objection 1 alone

1.8.1 National policy gives substantial weight to the need for renewable electricity generation, storage and transmission infrastructure. I do not seek to diminish that need. But national need is not an automatic entitlement for every project at every location and in every configuration.

- 1.8.2** The planning balance must identify the residual harms after realistic and resilient mitigation, give those harms proper weight and then compare them with the benefits of this particular project. It is not sufficient to acknowledge significant effects and then treat them as overridden simply because the development contributes to national energy objectives. Nor should a Year-15 mitigation assumption be treated as certain where establishment, drought, replacement lag, winter permeability or operational clearances can materially affect screening performance.
- 1.8.3** On the limited case addressed here, the adverse effects are substantial: extensive transformation of landscape character; significant and long-lasting visual change; a major concentration of permanent and semi-permanent 400 kV infrastructure at Great Moulton; 13 – 15 m substation architecture and much taller transmission elements which planting cannot wholly screen; mitigation which takes many years to establish and may itself alter landscape character; uncertainty over the resilience and uniformity of that planting; prolonged construction activity; and permanent or long-lasting changes to rural access routes and highway features.
- 1.8.4** Taken together, those harms significantly outweigh the need and benefits relied upon by the Applicant in the balance advanced in this objection. I therefore consider that there is a sufficient basis on landscape, visual and construction grounds alone for the DCO not to be made unless the Examination produces materially different evidence about the maximum physical form of the development, the scale and duration of its effects, the effectiveness and resilience of mitigation, and the residual significance of those effects.
- 1.8.5** The later objections add to that balance. If the Examining Authority accepts that the DCO would establish a permanent and potentially expandable grid node, facilitate a Great Moulton Energy Hub, produce wider cumulative or industrialising effects, contribute to an energy corridor or leave unresolved BESS safety concerns, those are additional harms and uncertainties. They make an already adverse balance still more adverse.

1.9 Conclusion

- 1.9.1** The focused question for the Examination is whether, after giving proper weight to national energy need, the residual landscape and visual harms and the construction and access harms of East Pye remain so substantial that they outweigh that need. In my assessment they do. That conclusion is reinforced, not displaced, by the Applicant's reliance upon planting which can soften lower equipment but cannot screen the full height or engineered character of the 400 kV complex and overhead-line works.
- 1.9.2** That conclusion should be reached before the separate matters raised in Objections 2–7 are added. This sequencing avoids serious direct effects being diluted by the size of the wider application and ensures that acknowledged need does not become a substitute for examining whether the environmental price of this particular scheme, after realistic mitigation rather than idealised screening, is acceptable.

Appendix A1

Great Moulton Electrical Transmission Complex Core – full supporting evidence for Objection 1

- A1.1** This appendix brings into Objection 1 the full evidential material previously assembled on the collective physical and elevational character of the major electrical infrastructure proposed south-west of Great Moulton. It is supporting evidence for the landscape, visual and construction case and is not a separate objection.
- A1.2** For analytical purposes the geographically concentrated group is defined as the “Great Moulton Electrical Transmission Complex Core” (“the Complex Core”). It comprises the NGET 400 kV substation, the adjoining East Pye 400 kV Project Substations, BESS and transformers, reactive-power equipment, cable sealing ends, overhead-line turn-in and pylon works, high-voltage cabling, access, fencing, lighting, drainage and other common ancillary infrastructure.
- A1.3** The term is analytical and geographical; it is not an Applicant, NGET or NESO project name. “Great Moulton” identifies the community and landscape within which the core is concentrated. “Electrical Transmission” reflects the dominant 400 kV function and direct connection to the National Electricity Transmission System. “Complex” recognises that several functionally interdependent compounds and linear works would be experienced together. “Core” distinguishes this immediate fixed concentration from the wider and more prospective Great Moulton Energy Hub and Norwich Main–Great Moulton–Yaxley Energy Corridor considered in later objections.
- A1.4** The comparator material below does not assert that the real installations illustrated are the precise designs that will be constructed at East Pye. They are typological comparators showing what technical terms used in the application mean in physical form. Because NGET configuration, micro-siting and orientation remain capable of change, real-world comparison is relevant to understanding and testing the maximum consented envelope and ensuring that illustrations, environmental assessment and DCO controls address the same worst case.

The infrastructure requiring a combined assessment

- A1.5** The controlled parameters allow a substantial concentration of development. APP/7.18 permits a National Grid AIS compound of up to 6 hectares with busbars up to 15 m high; a BESS-site 400 kV Project Substation of up to 3 hectares; a Sub-Site 1B 400 kV Project Substation of up to 1.1 hectares; and a BESS compound of up to 6.5 hectares. The two Project Substations may include structures up to 13 m high. These figures exclude overhead-line works, permanent access, construction land and landscape mitigation.

Table 1.1: Great Moulton Complex Core Main components

Component	Maximum East Pye parameter	What the parameter may mean visually
National Grid AIS substation	6 ha; busbars to 15 m	Extensive open yard of repeated gantries, insulators, switchgear and conductors.
BESS-site 400 kV Project Substation	3 ha; busbars to 13 m	A second transmission-scale electrical compound adjoining the BESS.
Sub-Site 1B 400 kV Project Substation	1.1 ha; busbars to 13 m	A further high-voltage compound within the Great Moulton cluster.
BESS	6.5 ha; enclosures to 3.5 m	Long repeated rows of containers, conversion equipment and transformers.
National Grid fencing/security	3 m fence; CCTV to 4.2 m	Continuous industrial enclosure and security infrastructure.
National Grid internal access	Up to 8 m wide	Engineered access capable of receiving heavy electrical plant.

A1.6 The combined maximum compound area of the National Grid Substation, the two Complex Core Project Substations and the BESS could therefore approach 16.6 hectares. Using FIFA's recommended 105 m × 68 m field of play (0.714 ha), this is equivalent to approximately 23.2 full-size football pitches. The comparison is deliberately conservative because it excludes the overhead-line and pylon works, access, cable corridors, drainage, mitigation areas and temporary construction land.

Table 1.2: Complex Core Land Take and What that equates to in terms of football pitch size equivalents

Complex Core facility	Maximum area	Approx. full-size football pitches
National Grid 400 kV Substation	6.0 ha	8.4
BESS-site 400 kV Project Substation	3.0 ha	4.2
Sub-Site 1B 400 kV Project Substation	1.1 ha	1.5
BESS	6.5 ha	9.1
Combined maximum compounds	16.6 ha	23.2

Real comparator 1: outdoor 400 kV AIS substation



Figure A1.1. Staythorpe switching station, Nottinghamshire: a real outdoor high-voltage AIS installation. The image illustrates repeated steelwork, insulator stacks, conductors and the visually open but extensive character of this form of development. Photograph: [REDACTED], Geograph, CC BY-SA 2.0.

- A1.7** East Pye proposes an outdoor air-insulated switchgear (“AIS”) substation rather than a compact building containing gas-insulated switchgear. A typical AIS elevation is formed by ranks of equipment at different heights: concrete plinths and control cabinets close to ground level; circuit breakers and disconnectors above them; tall insulator stacks and equipment supports; and busbars and terminal gantries at the upper level.
- A1.8** The principal landscape effect is not captured by a single height figure. AIS equipment is visually permeable but repeated across a large area. The industrial character is created by breadth, repetition, geometry and technical complexity. A 15 m busbar is approximately five times the height of a 3 m security fence and broadly comparable with the height of a four- or five-storey building, although its structure is more open.
- A1.9** The Examining Authority should require a verified elevation of the maximum National Grid Substation envelope showing the permitted number and disposition of feeder bays, coupler and section bays, busbars, terminal structures, reactive-power units, control buildings, fencing and access. An outline rectangle marked “substation” is not sufficient.

Real comparator 2: major 400 kV transformer



Figure A1.2. Real high-voltage transformer within an outdoor substation. The central tank, cooling radiators, fans, bushings and surrounding busbar equipment demonstrate the solid visual mass that may be obscured by a generic substation outline. This is a real-world comparator, not the proposed East Pye transformer design.

- A1.10** A major transformer commonly comprises a large central steel tank, external banks of cooling radiators and fans, high-voltage bushings, a conservator vessel, pipework, monitoring equipment and an oil-containment system. It may be lower than the maximum busbars but is substantially more visually solid and can be a dominant object within the compound.
- A1.11** Transformers also bear directly upon operational noise, fire and oil-containment risk, drainage, abnormal load transport and replacement access. Yet the application does not appear to bring together in one authoritative schedule the maximum number, location, dimensions, rating, operating mass, transport mass, oil inventory and sound-power level of all major transformers in the Complex Core.
- A1.12** The absence of that consolidated schedule makes it difficult to confirm that the landscape visualisations, noise model, traffic assessment, drainage design and safety assessment all use the same transformer worst case. The Examination should require a common transformer schedule against which every relevant assessment can be audited.

Real comparator 3: BESS and associated transformers



Figure A1.3. Hallen BESS near Bristol: repeated battery modules, platforms and associated transformer equipment. Hallen is a 32 MW/32 MWh facility and is used only to demonstrate equipment form; it is not a scale comparator for East Pye. Image: Wilson Power Solutions.

- A1.13** Battery enclosures are not individually tall, but a utility-scale BESS derives its visual effect from long repeated rows, access aisles, conversion units, transformers, switchgear, lighting, fencing and engineered surfacing. The East Pye BESS compound could extend to 6.5 hectares and would adjoin a separate 400 kV Project Substation of up to 3 hectares.
- A1.14** The Hallen example is deliberately not presented as a scale analogue: at 32 MW/32 MWh it is much smaller than East Pye's potential import and export capacity. Its value is to demonstrate the visual vocabulary of a real BESS. The correct East Pye illustration must apply the Applicant's maximum parameters, unit numbers and spacing to the actual viewpoint and landform.
- A1.15** Separate illustrations of the BESS and Site 1 may fail to communicate the combined experience of the Complex Core: the BESS, its transformers, the adjoining Project Substations, the National Grid Substation and overhead-line works. A receptor does not experience works packages in isolation.

Real comparator 4: cable sealing ends and terminal gantries



Figure A1.4. National Grid 400 kV cable sealing-end compound at Horsey, associated with the Hinkley connection. The image shows three tall cable terminations, supporting steelwork, conductors, gantry and security enclosure. Image: National Grid.

- A1.16** Where an underground 400 kV circuit terminates, each electrical phase rises through a substantial outdoor termination. A three-phase circuit normally creates at least three tall termination units, together with support steelwork, surge arresters, bonding equipment, conductors, access and security fencing.
- A1.17** The application should identify the maximum number and location of sealing ends and terminal structures and show them on the relevant elevations. Generic references to underground cables can otherwise create the misleading impression that the connection has no appreciable above-ground expression.

Other components requiring reliable elevations

- A1.18** Busbars, circuit breakers and disconnectors form repeated layers of equipment rather than isolated structures. Even where each item is relatively slender, repetition across several bays produces an extensive and unmistakably industrial elevation. The number, spacing and disposition of those units should be specified or bounded.
- A1.19** The National Grid Substation description includes “reactive power units” but does not appear to commit to a single technology. Shunt reactors, capacitor banks, STATCOM equipment and harmonic-filter compounds have materially different appearance, noise characteristics, oil inventories, cooling requirements and footprints. The permitted maximum option must be identified and assessed.
- A1.20** The overhead-line connection is also a major part of the elevation. East Pye allows existing pylons to be removed or relocated, new and temporary pylons to be installed, conductors to be restrung and either a single or double turn-in to be constructed. A double turn-in can produce terminal or angle towers, redirected conductors, earth wires and a concentrated relationship between the overhead line and substation gantries.

- A1.21** The Grid Connection Statement records that the double turn-in is preferred while retaining a single-turn-in option. The Applicant should demonstrate expressly which option is the environmental worst case for each viewpoint, rather than assuming that both are represented adequately by a generic overhead-line envelope.
- A1.22** Relay rooms and control buildings may be comparatively low - up to 19 m long, 7 m wide and 4.2 m high - but introduce solid building mass within the more open electrical steelwork. Their number, location, materials and lighting should be represented in detailed elevations.
- A1.23** Palisade fencing up to 3 m, CCTV poles, secure gates, warning signage and lighting reinforce the industrial character of the compounds. Planting cannot necessarily be placed immediately beside security fencing, around sightlines or beneath high-voltage conductors. Visualisations should show operational clearances and realistic maintenance corridors rather than assuming an uninterrupted planting screen.
- A1.24** The National Grid internal access road may be up to 8 m wide. Together with hardstanding, crane areas, transformer bases, drainage channels and oil-containment structures, it contributes to the engineered character and land take. These elements should not disappear from photomontages behind an idealised foreground planting belt.

Weaknesses in the submitted visual evidence

- A1.25** The application's visual evidence is weakened by reliance on illustrative rather than consented layouts. The Grid Connection Statement states that NGET configuration, micro-siting and orientation continue to be discussed and that the Indicative Masterplan and engineering drawings will be revised. The maximum parameters, not the attractive features of an indicative arrangement, must therefore control the assessment.
- A1.26** There is also a documented inconsistency in the number of 400 kV Project Substations. The Scoping Report described two, whereas ES Chapter 4 and other application documents seek up to three. The Planning Inspectorate specifically required consistency and accuracy across the application and draft DCO. This raises the question whether every visualisation includes the third Project Substation and whether consultation was conducted on the configuration now sought.
- A1.27** Separate BESS, Site 1 and cable-route visualisations do not necessarily provide a combined view of the Great Moulton Electrical Transmission Complex Core. The assessment should establish what would be visible simultaneously and sequentially from Great Moulton, Wacton, nearby residences, equestrian and business receptors, quiet lanes and public rights of way.
- A1.28** The assessment must distinguish Year 1 conditions from mature planting and include winter conditions. Substation development is operational immediately; landscape mitigation takes years to establish and is less effective in winter. For the permanent National Grid Substation, planting and management must be secured for the substation's lifetime, including after East Pye is decommissioned.
- A1.29** The problem is not simply whether the plant can be screened. Extensive woodland belts, bunds or engineered landform may themselves be uncharacteristic of the local

landscape. Mitigation can therefore substitute one incongruous feature for another, while leaving taller electrical structures visible above it.

Required examination evidence

- A1.30** The Examining Authority should require a consolidated maximum envelope plan and component schedule for the Great Moulton Electrical Transmission Complex Core. It should reconcile the Works Plan, draft DCO, APP/7.18, engineering information, landscape visualisations, noise model, traffic assessment and management plans.

Evidence required	Minimum content	Reason
Combined maximum-envelope plan	All permanent compounds, access, pylons, conductors, cable terminations, fencing, lighting, drainage and planting.	Shows the total concentration rather than separate works packages.
Scaled elevations	Existing ground, maximum structures, 2 m human figure, typical dwelling/tree references and dimensions.	Translates technical parameters into understandable physical scale.
Transformer schedule	Number, function, dimensions, mass, oil, sound power and compound.	Enables consistency checks across noise, transport, safety and landscape evidence.
Equipment schedule	Bays, busbars, breakers, disconnectors, reactors/STATCOM, sealing ends and control buildings.	Defines the assessed AIS and reactive-compensation envelope.
Verified photomontages	Year 1, Year 15 and winter; maximum envelope; single/double turn-in as appropriate.	Tests actual receptor experience and reliance on planting.
NGET confirmation	Confirmation that the parameters accommodate its reasonably foreseeable detailed design and identify future revision limits.	Avoids consent being granted on an Applicant illustration NGET may not adopt.

- A1.31** At least four verified elevation directions should be supplied: north towards Great Moulton; east or south-east towards the BESS and Project Substation grouping; south towards Wacton and the local lane network; and west showing the relationship with the existing overhead line. Viewpoint-specific photomontages should then place those elevations within the actual landform and vegetation pattern.

Questions arising from the Complex Core evidence

1. How many 400 kV Project Substations are authorised, required and included in each assessment and visualisation?
2. Can the Applicant provide one plan showing the maximum aggregate footprint of the Great Moulton Electrical Transmission Complex Core?
3. Do the submitted elevations and photomontages show the 6 ha National Grid Substation, both Project Substations within the Complex Core, BESS, transformers and overhead-line works together?
4. What is the maximum number, size, oil inventory, mass and sound-power level of the transformers and reactors?

5. Which reactive-power technologies may be installed, and which physical and acoustic option forms the assessed worst case?
6. Which single- or double-turn-in configuration forms the visual and construction worst case?
7. Which elements shown on the Indicative Masterplan are secured, and which may change through NGET detailed design?
8. Are Year 1 and winter visualisations available from Great Moulton, Wacton, nearby residences, quiet lanes and public rights of way?
9. How is landscape mitigation maintained for the permanent National Grid Substation after East Pye is decommissioned?
10. Has the Applicant assessed the change in landscape character arising from the Great Moulton Electrical Transmission Complex Core as a whole, including its relationship to the wider potential electrical infrastructure hub?
10. What mortality, replacement and reduced-growth allowance has been incorporated into the Applicant's Year-15 visualisations?
11. Can the Applicant provide Year-15 sensitivity tests for 10%, 20% and 30% planting loss, replacement lag and winter leaf-off?
12. What minimum effective screening height and density is secured at Year 15, and what watering and aftercare obligations support that outcome?
13. What proportion of the 13 m Project Substation, 15 m NGET substation and 53–61 m overhead-line infrastructure remains visible above planting from the principal Great Moulton receptors?
14. How has the assessment distinguished the screening of lower equipment from the continuing visibility and character effects of the electrical complex as a whole?

Reasoned conclusions

Conclusion	Reasoned justification
The physical character is insufficiently communicated.	The principal parameters are distributed across several documents and are not assembled into a single maximum-envelope plan or elevation.
Real comparators demonstrate potentially substantial effects.	AIS compounds are extensive assemblages of repeated equipment; transformers, BESS equipment and cable terminations add solid and vertical elements not conveyed by a simple boundary.
The Complex Core must be assessed as a whole.	Residents and landscape receptors experience the combined and sequential presence of all components, not individual works packages.
The submitted illustrations cannot be treated as the final design.	NGET configuration, orientation and micro-siting remained under discussion and engineering material was expressly described as subject to revision.
The Rochdale envelope requires stronger evidential control.	The Examining Authority must be satisfied that every realistic design within the permitted envelope has been assessed and will remain within secured environmental limits.

Conclusion	Reasoned justification
Further examination evidence is necessary.	A consolidated schedule, scaled elevations, verified photomontages and NGET confirmation are proportionate to the scale, permanence and concentration of the proposed development.

A1.32 The case is therefore not based upon an assumption that East Pye will reproduce any one comparator installation. It is based upon the absence of sufficiently clear evidence showing what the authorised maximum Great Moulton Electrical Transmission Complex Core could look like when all components are assembled in their actual setting.

A1.33 Until that evidence is supplied, the Examining Authority cannot safely conclude that the landscape, visual, noise, construction, safety and cumulative implications of the Great Moulton Electrical Transmission Complex Core have been assessed on a consistent and comprehensible worst-case basis.

Cross-reference of sources cited in Appendix A1

- S1. East Pye Solar, Grid Connection Statement, APP/7.12, particularly paras 4.1.1–4.2.1. It records continuing discussion of NGET configuration, micrositing and orientation and the intended revision of illustrative material.
- S2. East Pye Solar, Design Principles, Parameters and Commitments, APP/7.18, particularly Tables 4.2–4.4.
- S3. East Pye Solar, Concept Masterplan, Section Map A, April 2026; read with Indicative Masterplan APP/6.2.4.1 and Works Plan APP/2.3 Revision B, Part 2, Sheet 19 of 19.
- S4. FIFA Stadium Guidelines, section 5.3: recommended field-of-play dimensions 105 m × 68 m, an area of 7,140 m² or 0.714 ha. The stated pitch equivalents use this area solely as an illustrative scale comparison.
- S5. [REDACTED] “Staythorpe Switching Station”, Geograph image 3137040, photographed 14 September 2012, licensed CC BY-SA 2.0.
- S6. Nation.Cymru, “National Grid proposes new Welsh substation to connect green energy”, 28 June 2023; photograph used only as a real high-voltage transformer comparator.
- S7. National Grid, “New 184-tonne transformer travels to Cambridgeshire substation”; cited as a real abnormal-load comparator relevant to transformer transport.
- S8. Wilson Power Solutions, “Hallen BESS 32MW/32MWh”, project case study; image and description used to demonstrate equipment form, not East Pye scale.
- S9. National Grid, “Enabling the flow of power in the south west”, Horsey 400 kV cable sealing-end compound, March 2024.
- S10. Planning Inspectorate, section 51 advice following acceptance, pp. 3–4, and section 55 Acceptance Checklist, p. 32, East Pye Solar.
- S11. East Pye Solar, Guide to the Application, APP/1.3; ES Chapter 4 – The Scheme, APP/6.1.4; ES Appendix 4.1 – Illustrative Technical Information, APP/6.3.4.1.
- S12. East Pye Solar, ES Chapter 7 – Landscape and Visual, APP/6.1.7; ES Chapter 19 – In-Combination Effects Assessment, APP/6.1.19.

Objection 2 – Great Moulton (Long Stratton) 400 kV Substation and the Proliferation of Infrastructure

Context

This objection is about a simple point: if East Pye leads to a new permanent 400 kV substation at Great Moulton, the Examination should establish now whether that infrastructure is likely to do more than serve East Pye alone. Experience elsewhere shows that once a major grid connection exists it can make later solar, battery and network projects easier to connect, so the Examining Authority should understand the intended scale, capacity, permanence and future role of the proposed substation before deciding whether its wider environmental consequences have been properly assessed.

What the Examination needs to cover

I respectfully suggest that the Examination should cover:

- whether the proposed Great Moulton (Long Stratton) substation is genuinely a finite East Pye-only connection or a permanent node capable of serving a wider network or later users;
- the difference between the minimum infrastructure needed to connect East Pye, the configuration actually proposed or safeguarded, and any reasonable expansion or multi-user capability;
- why the proposed circuit turn-in, busbar, bay, land, access and cable-entry arrangements are required, and whether any of them materially reduce the technical or financial barriers to later connections;
- the alternatives considered, including smaller or more constrained connection arrangements and connection at existing or other substations;
- the intended role and permanence of the NGET asset after East Pye itself is decommissioned, and whether the substation would then remain as an established transmission node;
- what the experience of previously constructed and comparable 400 kV substations shows about the credible risk of later clustering of solar, BESS, converter, cable and reinforcement infrastructure; and
- whether there are institutional, financial and locational reasons why NGET may be positively disposed to facilitating or accommodating further connections at Great Moulton once the node exists, as summarised in Appendix 3;
- whether the reasonably foreseeable environmental consequences of creating the node have been assessed now, before the new infrastructure becomes part of the baseline for later applications.
- what recent large solar DCO examinations show about the treatment of cumulative solar development, and whether those cases assessed only identified projects or also the prospect that grid infrastructure itself could facilitate later, as-yet-unidentified projects;

Questions to relevant organisations

I would suggest that the following questions should be asked of the relevant organisations so that the Examining Authority can form a properly evidenced view:

- **Applicant** - What is the minimum NGET infrastructure technically required solely for East Pye, and how does that differ from the configuration shown, allowed for or safeguarded by the DCO?
- **Applicant** - Has the Environmental Statement assessed the reasonable worst case if the substation has spare, expandable or multi-user capability, and has it clearly distinguished that case from an East Pye-only configuration?
- **Applicant** - What alternatives were examined to avoid or reduce the creation of a new permanent 400 kV node at Great Moulton, and why were they rejected?
- **Applicant** - What limits, requirements or other controls are proposed to ensure that infrastructure materially beyond the assessed configuration is not created without appropriate further environmental assessment?
- **Applicant** - Having regard to recent solar DCO practice, has the Environmental Statement considered only identified “other development”, or has it also tested whether authorising a new permanent 400 kV node at Great Moulton could itself be an indirect or enabling cause of further reasonably foreseeable solar, BESS or electricity-network development? If not, why not?
- **NGET** - Does NGET regard Great Moulton (Long Stratton) as a dedicated East Pye connection, a wider switching or network substation, a potential collector or multi-user point, or some combination of those functions?
- **NGET** - Why are a double-circuit turn-in and double-busbar arrangement being considered or safeguarded; what is required for East Pye alone; and what additional operational, resilience, maintenance, switching or future-connection capability would those arrangements provide?
- **NGET** - How many bays, busbar positions, cable-entry positions and other connection opportunities are required for East Pye, how many are proposed or could be accommodated, and what land or access is being safeguarded for later expansion?
- **NGET** - When was Great Moulton first identified as a possible 400 kV node; did that arise solely from East Pye; and has the location or design been considered strategically alongside Norwich Main, Norwich–Tilbury, Yaxley or other East Anglian transmission works?
- **NGET** - What is the intended network role of the substation after East Pye is decommissioned, in what circumstances would it be removed, and has NGET assessed the cumulative land-use, landscape, visual, access and other environmental consequences of retaining a permanent and potentially expandable node?
- **NGET** - Once the Great Moulton node is established, what institutional, policy, investment and site-opportunity considerations would influence NGET’s willingness to facilitate or accommodate further connections there, and how would those considerations be balanced against environmental and amenity effects?
- **Applicant and NGET** - What material differences do they identify between the Great Moulton proposal and the comparative 400 kV locations examined in this objection, and do those differences reduce or reinforce the risk of later connection-led clustering?

Formal Objection 2

I object to the East Pye Solar DCO insofar as it would facilitate the creation of a new permanent and potentially expandable 400 kV NGET transmission node at Great Moulton (Long Stratton) without the Examination first establishing and assessing the extent to which its configuration, capacity, permanence and network role would enable or materially facilitate subsequent electricity generation, storage, demand or network connections, and the reasonably foreseeable indirect, enabling and cumulative environmental consequences of doing so, including whether creation of the node itself is likely to alter the location and probability of later solar, storage or network development.

Reasoned justification

2.1 About this Objection and relationship with Objection 1 and Objections 3 – 7

- 2.1.1** This Objection 2 forms part of a deliberately structured sequence of objections to the East Pye Solar DCO. Objection 1 addresses the direct landscape, visual and construction harms of East Pye itself. This objection does not repeat that case. It addresses the separate enabling question of whether the DCO would establish a new permanent and potentially expandable 400 kV transmission node at Great Moulton (Long Stratton), and what reasonably foreseeable consequences may flow from creating that node.
- 2.1.2** The relationship with Objection 1 is important. Objection 1 asks whether the direct harms of East Pye are sufficient in their own right to weigh against the DCO. Objection 2 – this objection - asks a different question: whether authorising the new Great Moulton (Long Stratton) transmission infrastructure may materially alter the development baseline and reduce barriers to later generation, storage, demand or network connections.
- 2.1.3** Objection 3 follows directly but deals with a different evidential question. This Objection 2 is principally about NGET: what transmission asset it intends to create at Great Moulton, why that asset is configured as proposed, what permanence, capacity or expandability it may possess, and what network role NGET anticipates. Objection 3 is principally about NESO and the project pipeline: what projects and connection interests NESO knows about, what information lies behind the public registers, and whether that evidence indicates a credible cohort of future users of the node.
- 2.1.4** Objection 4 considers the cumulative and in-combination effects which such a hub could create. Objection 5 considers the distinct but related consequence that the concentration and repetition of electricity infrastructure could amount to an effective industrialisation of this part of the South Norfolk countryside. Objection 6 takes the concern one stage further and examines whether, together with Norwich Main to the north and Yaxley to the south, Great Moulton could contribute to a wider Norwich Main–Great Moulton–Yaxley Energy Corridor.
- 2.1.5** The division between the objections is deliberate. This Objection 2 is concerned with the enabling mechanism and with NGET's role in specifying, designing, constructing, owning and retaining the new transmission node. It does not repeat the direct landscape and construction case in Objection 1, the project-specific evidence in Objection 3, the cumulative assessment in Objection 4, the industrialisation case in

Objection 5 or the wider corridor analysis in Objection 6. The separation is intended to avoid duplication while allowing the Examining Authority to follow the chain of consequences in a logical order.

- 2.1.6** Objection 7 addresses the separate fire and hazard safety implications of incorporating a very large BESS within connected high voltage infrastructure. Although that objection has wider relevance to renewable energy projects incorporating BESS, it is directly relevant to East Pye. Taken together, Objection 1 and Objections 3–7 provide the wider context within which this Objection 2 should be read; each remains a substantive objection in its own right.

2.2 Why a New 400 kV Grid Node Creates a Proliferation Risk

- 2.2.1** The objection is not to the principle of reinforcing the national transmission system or providing East Pye with a technically adequate grid connection. It is that the application does not yet demonstrate that the proposed Great Moulton (Long Stratton) 400 kV substation has been assessed in its full and true functional context: a permanent and potentially expandable NGET transmission node which may materially facilitate further electricity infrastructure after the East Pye decision.
- 2.2.2** The DCO should not proceed on the untested assumption that the substation is merely a dedicated and finite component of East Pye. The physical configuration, circuit turn-in, land take, busbar and bay provision, access arrangements, expansion capability and permanent retention of the NGET asset may create a materially wider development opportunity. Whether that is in fact NGET's intention, an incidental consequence of a standard design, or a strategic network choice is a matter which the Examination should establish directly from NGET.
- 2.2.3** I respectfully request that the Examining Authority obtain sufficient evidence from the Applicant and NGET to determine the intended and reasonably foreseeable role of the substation. This objection does not seek to establish the identity, maturity, Gate status or private land position of individual customer projects. Those are NESO/project-pipeline matters addressed in Objection 3. The purpose here is to establish the enabling asset against which that separate project evidence must later be tested.

Why the monopolistic NGET structure provides an important context

- 2.2.4** National Grid Electricity Transmission plc (NGET) owns and maintains the high-voltage transmission network in England and Wales. It is a transmission licence holder and a wholly owned subsidiary within the National Grid plc group, whose ultimate owners are the shareholders in the listed parent company. NGET therefore performs an essential public-service function through a privately owned, shareholder responsive company operating a regulated natural monopoly.
- 2.2.5** The word “monopoly” in this context is descriptive, not pejorative: it is entirely understandable that duplicating competing national transmission networks would be inefficient, so competition is replaced by statutory duties, licence controls and economic regulation¹.

Public function and financial return is a key driver of NGET philosophy

- 2.2.6** NGET is required to develop and maintain an efficient, co-ordinated and economical transmission system, while Ofgem controls the revenue it may recover and the outputs it must deliver through the RII0² price-control framework. That framework is deliberately intended to finance necessary investment and permit a fair return on efficiently incurred capital. It would therefore be unrealistic to treat NGET as financially indifferent to network expansion.
- 2.2.7** This is not intended to be in any sense an allegation that NGET is exploitative or manufactures unnecessary projects. It does mean that, where legitimate connection demand, strategic reinforcement and regulatory approval create an investment opportunity, NGET is institutionally equipped and commercially expected to respond³.

How the new grid structure can facilitate further connections

- 2.2.8** A new 400 kV substation is not merely passive infrastructure for the first named user. Once its site, busbars, bays, line turn-ins, access arrangements and land platform exist - or can be expanded - the technical and financial barriers facing later connections may be reduced.
- 2.2.9** NGET's regulated duty to accommodate an efficient network, together with successive developer connection requests and approved investment allowances, can therefore facilitate a cluster of generation, storage and reinforcement works. I think "Facilitate" is the correct term: the substation does not itself establish each subsequent project, but it can alter the opportunity structure within which promoters choose sites and pursue connections.
- 2.2.10** The possibility of later connections is not only a matter of spare engineering capability. Appendix 2.3 identifies three broader reasons why, once a substantial new transmission node exists, NGET may have institutional and commercial reasons to facilitate or accommodate further connections there: first, its strategic role in enabling the transition to renewable and low-carbon electricity; secondly, the regulated investment model under which efficiently incurred network investment can support returns to the National Grid group and its investors; and thirdly, the practical opportunity created by an established 400 kV node in an area where further generation, storage or demand sites may be capable of coming forward.
- 2.2.11** None of these factors proves that NGET will seek additional customers at Great Moulton, and NGET does not itself determine the planning acceptability of those projects. They do, however, reinforce the need for the Examination to test the node's likely future role rather than assume an East Pye-only endpoint.

Available checks and balances on NGET do not obviate the need for environmental scrutiny

- 2.2.12** NGET is not of course free to build simply whatever it wishes. Its activities are constrained by its transmission licence, Ofgem's price controls and incentives, technical and security standards, safety law, planning and environmental consent regimes, and the Electricity Act 1989 duty to have regard to amenity and to mitigate effects when formulating its own proposals.

2.2.13 Since 1 October 2024, the publicly owned National Energy System Operator (NESO), rather than the National Grid group, has held the independent system-operation and whole-system planning role and is leading strategic connection reform. These are substantial safeguards, but they do not remove the need for project-specific and cumulative environmental scrutiny.

Who considers the environmental consequences of new connections?

2.2.14 NGET must consider and mitigate the environmental effects of the transmission works it promotes. It is not, however, the planning authority for every solar farm, BESS or other development seeking a connection, nor is its economic/regulatory role a substitute for environmental assessment.

2.2.15 The roles of individual bodies matters. Promoters normally assess their own projects; NGET addresses its own works and connection requirements; NESO considers system need and strategic alignment; and the relevant planning authority, Examining Authority or Secretary of State determines the land use and environmental acceptability of the proposal before it.

2.2.16 Unless the enabling question is expressly asked, no single participant is necessarily responsible for examining the significance of creating the node itself. That is why the East Pye Examination should require NGET to explain the minimum infrastructure required for East Pye, the configuration actually proposed, the extent of any spare or expandable physical capability, and the intended permanent network role of the Great Moulton node.

How oversight has changed

2.2.17 Before electricity privatisation, the Central Electricity Generating Board planned generation and the transmission system within a single public-sector structure. The Electricity Act 1989 reforms separated functions and created the licensed, economically regulated transmission model; the National Grid Company began operating the system following privatisation in 1990.

2.2.18 The Planning Act 2008 later introduced the development consent regime for nationally significant energy infrastructure, supported by Environmental Impact Assessment, public examination and national policy statements.

2.2.19 Yet the route by which a 400 kV substation is scrutinised still depends on the development of which it forms part: voltage alone does not ensure that every stand-alone substation is examined as a separate NSIP. A substation may instead be authorised as associated development within another DCO or through the town and country planning regime, while related projects arrive separately and at different times.

Why greater scrutiny is now appropriate

2.2.20 The present circumstances differ materially from those in which many older rural substations were established. Decarbonisation, storage, offshore connections, data and electrification demand, accelerated connection reform and major transmission reinforcement are nowadays producing a much larger pipeline of independently promoted schemes. Modern 400 kV nodes can be long-lived, expandable and enabling

infrastructure with environmental effects extending far beyond their fenced compounds.

2.2.21 Drawing No 2.1 in Appendix 2.1 illustrates how a grid substation established to provide a grid connection to a single project can be engineered to allow for subsequent (and potentially multiple) connections.

2.2.22 Greater scrutiny is therefore not to be seen as an attempt to obstruct necessary national infrastructure or to impose an environmental planning function on NGET alone. It is a proportionate response to the scale and permanence of the investment. It should test alternatives, future capacity and expansion assumptions, cumulative landscape and community effects, and whether environmental costs are being displaced from the first consent into a succession of later applications. Current national policy itself requires electricity network proposals to be assessed through the relevant environmental and planning framework.

NGET's role in facilitating a hub or corridor

2.2.23 NGET does not decide whether an individual solar farm, BESS or other development obtains planning permission. It can nevertheless influence the spatial opportunity for later development through the location, specification and enduring capability of the transmission infrastructure it provides. The distinction is important: facilitation does not require NGET to promote a hub as a policy objective.

2.2.24 The present DCO material, as reflected in my recent Environmental Information Regulations request to NGET (See Appendix 2.2 below) indicates that East Pye can in principle be connected through a minimum of one transmission circuit, while both single- and double-circuit turn-in arrangements are contemplated. The Examination should therefore establish why NGET is considering or requiring the turning-in of both existing 400 kV circuits at Great Moulton and whether that additional configuration is required solely for East Pye or also serves resilience, switching, maintenance, future network development or later customer connections.

2.2.25 The same issue arises with the proposed double-busbar arrangement, the scale of the National Grid compound, the number and purpose of connection bays, spare busbar positions, cable-entry positions, undeveloped land and the ability to accommodate later connections without material enlargement. None of those features proves that later projects will proceed. They are, however, precisely the features which can make a new node more readily usable by later customers.

2.2.26 The fact that the NGET substation is intended to remain as part of the transmission network after the East Pye generating and storage infrastructure is decommissioned reinforces the need to understand its independent network role. The Examining Authority should know whether NGET regards the asset as a dedicated single customer connection, a switching/network substation, a potential collector or multi-user point, or some combination of those functions.

- 2.2.27** There is also a wider strategic question. The EIR asks when Great Moulton was first identified as a possible 400 kV node, whether it arose solely from East Pye, whether NGET has considered it in conjunction with Norwich Main, Norwich–Tilbury or other East Anglian reinforcement, and whether NGET has assessed the cumulative land use, landscape or access consequences of concentrating multiple electricity connections at this location.
- 2.2.28** My EIR request to NGET remains outstanding at the date of this version. It is intended to establish the purpose, minimum East Pye requirement, alternatives, ultimate physical and electrical capability, relationship with North Anglia Connection Node A, status of the present design and permanent network role of the proposed substation. This objection should be updated if and when NGET responds, and any answer which materially narrows or strengthens the proliferation concern should be placed before the Examining Authority. If NGET for some reason fails for whatever reason to comply with my request, these are the questions that I feel that the ExA should be asking itself.
- 2.2.29** A separate evidential exercise is required in relation to NESO but is not addressed in this specific objection. NESO may hold project specific information about connection applications, Gate status, capacity, connection point, Original Red Line Boundaries, land readiness, superseded offers or projects not transparently represented on the current public TEC Register. Those matters go to the identity and foreseeability of potential future users and are addressed in Objection 3.
- 2.2.30** The questions arising from NGET’s enabling role and from the comparative evidence are summarised at the beginning of this objection so that the Examination can identify at the outset the evidence required from the Applicant and NGET. Project-specific questions for NESO remain within Objection 3.

The Rochdale Envelope and why design flexibility matters at Great Moulton

- 2.2.31** The “Rochdale Envelope” is an Environmental Impact Assessment approach used where a project needs some design flexibility at the time consent is sought. It does not permit an applicant simply to leave the project undefined. Instead, the applicant identifies maximum and, where relevant, minimum parameters and assesses the realistic worst case environmental effects that could arise anywhere within that envelope. Current Planning Inspectorate advice⁴, reflecting the Rochdale case law, emphasises three linked principles: a cautious worst case assessment; sufficient information to identify the likely significant effects and mitigation; and a project description which is not so broad or uncertain that proper assessment becomes impossible.
- 2.2.32** East Pye expressly adopts that approach. Its Environmental Statement states that flexibility is sought not only for solar PV and BESS technology but also for associated development including the BESS compound, 132 kV substations, 400 kV substations, the new National Grid substation and the grid connection infrastructure. The application therefore seeks consent for a range of permissible outcomes within

defined parameters rather than for a single fully detailed electrical layout fixed at the date of the DCO application⁵.

- 2.2.33** That is directly relevant to the proliferation issue raised in this objection. If the upper end of the authorised envelope permits a National Grid substation with a larger footprint, double-busbar arrangement, turn-in of both existing 400 kV circuits, additional bay positions, cable-entry opportunities, operational space or other features beyond the minimum physically necessary to connect East Pye alone, the DCO could lawfully facilitate construction of a more capable and adaptable transmission node without any later material change to the East Pye consent. The environmental assessment must therefore be tested against the configuration which the DCO would actually permit, not merely against an indicative layout or the minimum configuration which might ultimately be built.
- 2.2.34** The Rochdale Envelope does not, by itself, grant consent for an unidentified future solar farm, BESS or other customer to connect at Great Moulton. Any later project would remain subject to the applicable connection, planning, environmental and other consenting requirements. The narrower concern is that the first DCO may create the enabling transmission asset and may authorise it at a scale and configuration which materially lowers the engineering, land and cost barriers to later connections. Once constructed, that infrastructure would also become part of the physical and planning baseline considered by subsequent promoters and decision makers.
- 2.2.35** The Examination should therefore establish - by reference to the maximum parameters secured through the DCO and Design Principles, Parameters and Commitments, what is the smallest National Grid configuration required solely for East Pye - what is the largest configuration that could lawfully be delivered within the Rochdale Envelope, and what additional switching, resilience, expansion or multi-user capability the difference between those two configurations would provide. This is not an objection to the use of the Rochdale Envelope as such; it is a request that the flexibility which the Applicant has chosen to retain is fully understood when the enabling and cumulative consequences of the new node are assessed⁶.

Proliferation, cumulative assessment and the hazard of “salami slicing”

- 2.2.36** The planning system does not contain a general rule prohibiting a concentration or proliferation of renewable energy and electricity network projects around an established grid node. Each proposal must be determined under the statutory and policy framework applying to it. The protection against an environmentally incomplete project by-project view lies instead in the requirements to identify the whole development being authorised, assess its direct, indirect, secondary and cumulative effects, and take account of other development that is sufficiently foreseeable to form part of a meaningful cumulative assessment⁷.
- 2.2.37** The current Planning Inspectorate advice on cumulative effects treats “other existing and/or approved development” as including projects and plans that are reasonably foreseeable and recommends a transparent staged process of identifying, screening and assessing them. That does not require an applicant to predict every hypothetical future scheme. It does require the assessment to respond where there is evidence of a

credible development pathway rather than treating uncertainty as equivalent to no effect.

- 2.2.38** The current Overarching National Policy Statement for Energy, EN-1, is particularly relevant⁸. It states that the Planning Act 2008 is intended to provide a holistic planning regime so that the cumulative effects of different elements of the same project can be considered together, and that generating stations and related infrastructure should, wherever reasonably possible, be brought forward in a single application or in coordinated applications prepared in an integrated way. Where separate applications are necessary, the applicant must still provide sufficient information to comply with the EIA Regulations, including assessment of indirect, secondary and cumulative effects, encompassing grid connections.
- 2.2.39** “Salami slicing” is a convenient description of the risk that a development which is, in substance, one project or one environmentally connected whole is divided into smaller parts so that no decisionmaker sees or assesses the full effects. EIA case law has long rejected the use of project splitting where that would circumvent the objectives of environmental assessment and has stressed the need to take cumulative effects into account⁹. The expression should nevertheless be used carefully: separately promoted later projects are not automatically unlawful “salami slicing” merely because they share a grid node. The legal and planning question is whether works are genuinely separate projects, or whether they are sufficiently integral, consequential, foreseeable or cumulatively connected that their effects must be considered together or alongside one another¹⁰.
- 2.2.40** For Great Moulton the hazard is therefore structural rather than necessarily deliberate. East Pye could authorise the new permanent node; the node could then become an established part of the baseline; later promoters could present their schemes as separate projects responding to the network circumstances then existing; and each later decision could appear individually rational even though the combined landscape, traffic, amenity, safety and land-use consequences were never assessed at the point when the enabling transmission opportunity was first created. That is the pathway which the comparative evidence in Section 2.3 is intended to illuminate.
- 2.2.41** A proportionate examination does not require the Examining Authority to assume that all suggested future projects will proceed. It does require it to guard against both forms of under-assessment: first, an over flexible Rochdale Envelope which authorises a materially more capable substation than the environmental case has transparently explained; and secondly, a project-by-project approach which excludes credible consequential or cumulative development merely because each later element would require a separate consent. The practical test should be whether the maximum authorised Great Moulton configuration, together with the connection evidence available from NGET and NESO, creates a reasonably foreseeable pathway to further development which ought to be assessed, constrained or expressly examined now.

2.3 Comparative Evidence and Why Great Moulton Starts from a Different Position

- 2.3.1** The assessment below has been prepared to assist the examination of the East Pye Solar DCO, particularly the foreseeable consequences of establishing the proposed Great Moulton (Long Stratton) 400 kV substation. It does not automatically assume

that further projects will follow or that one grid node precisely models another. It asks whether experience elsewhere shows that a 400 kV connection point can become a focus for successive energy developments and, therefore, whether wider cumulative landscape, visual, traffic, amenity and community effects warrant examination now rather than being dismissed as speculative.

Why these comparative locations were selected

- 2.3.2** The examples illustrated in Table 2.1 below are a selected group of English 400 kV substations situated in, or materially affecting, lowland rural and populated landscapes. This setting is most relevant to East Pye: open farmed countryside; gentle topography; villages and dispersed homes; public rights of way and local roads; and landscapes vulnerable to accumulating substations, battery storage, solar arrays, cable corridors, overhead-line works and access infrastructure. Remote upland and wholly offshore examples as well as locations where a substantially or entirely industrialised landscape already prevailed are excluded.

How comparability should be understood

- 2.3.3** The locations are comparators, and not to be regarded as exact matches. High Marnham, East Claydon, Sundon and the Cottam/West Burton corridor have the strongest lowland rural or rural-fringe resemblance and are most useful in considering the spatial spread of later development.
- 2.3.4** Killingholme and Lackenby have a more industrial setting and carry less weight as landscape analogues but demonstrate how multiple projects can converge on an available 400 kV node.
- 2.3.5** Collectively, it is worth stating that the examples do not prove an inevitable outcome at Great Moulton; they do, though, identify a credible connection led pathway meriting proportionate investigation in the East Pye cumulative effects assessment and Examination.

Scope and qualification

- 2.3.6** The closest (in terms of characteristics, not in the geographical sense) English precedents show that a large 400 kV connection point can become a focus for successive solar, BESS, offshore wind, interconnector and network reinforcement projects. It is safer to say that the substation facilitated or attracted later development than that it legally or economically caused it. Available capacity, existing transmission lines, previous power-station closures and connection agreements are usually the decisive factors.

Table 2.1 Comparative evidence of what tends to follow the establishment of a 400 kV Grid Substation – 10 Lowland England examples

400 kV substation	Indicative timeline and subsequent infrastructure (with relevant dates)	Strength as precedent for a Great Moulton Energy Hub
1. Bicker Fen, Lincolnshire	Established as part of the East Midlands transmission network. 2014–21: Triton Knoll offshore wind farm (approximately 857 MW) with a new 4.7 ha onshore substation and 1.8 km 400 kV cable connection; energised in 2021. 2019–24: Viking Link (1.4 GW interconnector to Denmark) required two new bays and a major extension of Bicker Fen. 2020s: Heckington Fen Solar Park, including energy storage and a roughly 5.5 km 400 kV cable. By 2026 the surrounding cumulative-development picture included Viking Link, Triton Knoll, solar schemes, several consented BESS projects and a proposed 1.2 GW BESS with its own 400 kV infrastructure. ^{11,12,13}	Very strong: an initially discrete transmission site developed into a conspicuous energy-infrastructure cluster.
2. Cottam, Nottinghamshire	Developed for Cottam coal-fired power station, commissioned in the late 1960s; the station closed in 2019, releasing valuable transmission capacity. 2021–24: Cottam Solar Project, approximately 600 MW-class solar with energy storage, spread over three principal areas and connected to the existing 400 kV substation; DCO granted in September 2024. Mid-2020s onward: new Cottam–Keadby/West Burton 400 kV reinforcement and further clean-energy and redevelopment proposals in the Trent Valley. ^{14,15}	Very strong: retirement of the original generator did not remove the node; it made the connection point attractive to extensive new solar, storage and transmission development.
3. West Burton, Nottinghamshire	Constructed to serve West Burton A coal station, commissioned from 1966; the station closed in March 2023. 2021–25: West Burton Solar Project (approximately 480 MW) divided between West Burton 1, 2 and 3, with energy storage and lengthy underground grid connections to the existing 400 kV substation; DCO granted in January 2025. 2020s: STEP fusion project, Steeples renewable-energy proposals and National Grid line upgrades added to the wider energy landscape. The promoter expressly states that the solar scheme is named after its grid connection point. ^{16,17}	Very strong: close parallel with a substantial existing node attracting geographically dispersed renewable parcels.
4. High Marnham, Nottinghamshire	High Marnham power station operated from 1962 to 2003; the retained transmission location subsequently became strategically valuable. 2024–26: One Earth Solar Farm secured an import/export connection of up to 740 MW, with solar and associated BESS. Its promoter expressly says that site selection began with the availability of capacity at High Marnham following closure of the power station. Late 2020s/early 2030s: new High Marnham 400 kV substation and the North Humber–High Marnham and Chesterfield–High Marnham reinforcements; further solar and energy-hub proposals are emerging around the Trent corridor. ^{18,19}	Very strong prospectively: unusually explicit evidence that available grid capacity directed the location of a very large solar/BESS project.

400 kV substation	Indicative timeline and subsequent infrastructure (with relevant dates)	Strength as precedent for a Great Moulton Energy Hub
5. Bramford, Suffolk	Long-established 400/132 kV transmission node west of Ipswich. 2010s: Greater Gabbard offshore wind and associated East Anglian generation flows increased the importance of the node. 2020s: East Anglia ONE and the East Anglia THREE/ONE North offshore-wind programme involved major onshore cables, converter/substation works and reinforcement around Bramford–Friston. 2024–25: consent for a 300 MW/600 MWh Bramford Storage BESS, approximately 400 m from the substation. 2024 onward: Bramford–Twinstead 400 kV reinforcement to relieve the resulting transmission constraint. The BESS promoter records that nearly 3 GW of offshore wind is expected to connect at Bramford by 2030. ^{20,21}	Very strong: generation connections produced not merely individual substations but cables, compensating equipment, BESS and a major transmission reinforcement.
6. Creyke Beck, East Riding of Yorkshire	Long-established 400/275 kV node near Cottingham. 2010–20: selected as the connection area for major offshore generation. 2023–26: Dogger Bank A and B - 2.4 GW combined - connected through new converter stations, underground cables and a substantial extension of Creyke Beck. 2026 onward: Wanlass Beck expansion is intended to accommodate approximately another 3.2 GW of offshore wind and BESS. Nearby Birkhill Wood, consented in 2026, is planned to receive a further 4.22 GW from Dogger Bank D, Dogger Bank Southeast and Dogger Bank Southwest and to connect with the North Humber–High Marnham line. ^{22,23}	Very strong: successive connections have generated a family of extensions, converter stations, cable corridors and new adjoining substations.
7. Killingholme, North Lincolnshire	Developed as a major South Humber transmission and power-generation node. 2010–11: connection capacity allocated for the first and second gigawatts of the Hornsea offshore-wind zone. 2014 onward: HVDC/onshore converter and associated 400 kV connection works. 2019: Hornsea One, approximately 1.2 GW, began operation. 2021–22: Hornsea Two, approximately 1.4 GW, followed, requiring further substation and onshore electrical works. The wider Killingholme area subsequently attracted additional power generation, hydrogen, carbon-capture and transmission proposals. ^{24,25}	Strong: the node supported successive multi-gigawatt projects and substantial associated converter and connection infrastructure, although the immediate setting was already industrial.
8. Lackenby, Teesside	Long-established 400 kV substation serving the Teesside industrial area. 2010s: chosen as the connection location for Sofia and Dogger Bank C offshore wind. 2020–26: separate HVDC converter stations, cable landfalls and extensive underground cable routes developed. Dogger Bank C contributes 1.2 GW and Sofia approximately 1.4 GW, giving around 2.5–2.6 GW of offshore wind connected through the same transmission node. Further network reinforcement and low-carbon industrial projects have followed in the Tees Valley. ^{26,27}	Strong: two independent offshore projects sharing a single node produced separate converter, cable and reinforcement developments.

400 kV substation	Indicative timeline and subsequent infrastructure (with relevant dates)	Strength as precedent for a Great Moulton Energy Hub
9. Sundon, Bedfordshire	Long-established 400 kV substation in a predominantly rural but densely settled part of Bedfordshire. 2022–25: National Grid established its first 400 kV “grid park”, allowing several customers to share connection infrastructure. The initial group comprised an EDF 50 MW BESS and two additional batteries, providing almost 150 MW in total. 2025–30: consent for Statera’s much larger 500 MW, eight-hour Sundon Storage project. Other solar proposals, including Tebworth Solar Farm, have identified Sundon as their prospective connection point. ^{28,29}	Very strong for BESS proliferation: National Grid deliberately converted the substation into shared infrastructure designed to make further connections easier and quicker.
10. East Claydon, Buckinghamshire	Existing 400 kV substation in lowland rural Buckinghamshire, now proposed for replacement and enlargement to meet new connection commitments. 2023–26: Statera’s 500 MW East Claydon Storage secured consent and a 400 kV connection. 2024–26: Rosefield Solar Farm, with solar and BESS, secured a connection agreement (initially stated as 500 MW import and 500 MW export) and proposed a new 400/33 kV project substation and cable connection. 2024–25: Statkraft brought forward a separate East Claydon Greener Grid Park combining BESS and synchronous compensators. These developments sit alongside several smaller solar proposals and the planned rebuilding of the NGET substation. ^{30,31,32}	Very strong contemporary analogue: three separate large low carbon/flexibility proposals have converged on a rural 400 kV node, prompting replacement or expansion of the substation itself.

Purpose and central proposition

- 2.3.7** The ten named examples are established 400 kV substations or transmission locations whose present-day infrastructure clusters developed incrementally, and often semi-organically, over many years. Their histories are useful evidence of what an enduring high voltage node can facilitate, but they are not a template that must be repeated stage by stage before the potential consequences of Great Moulton can be examined.
- 2.3.8** The proposed Great Moulton (Long Stratton) substation would start from a materially different position. It would be a new 400 kV node introduced into a predominantly rural, populated and comparatively unindustrialised landscape at a time of rapid electricity system expansion, accelerated connection reform and substantial developer interest in solar generation and battery storage. The relevant question for the Examining Authority is therefore prospective: what development pathway would the creation, configuration and available capacity of this new node make technically and commercially more feasible?
- 2.3.9** The comparison should not be used to say: “other substations accumulated infrastructure slowly, so nothing beyond East Pye need be considered now.” The proper inference is the reverse. Because the long-term clustering tendency is already observable elsewhere, and because Great Moulton would be established with the benefit of modern network planning and a visible connection pipeline, its enabling and cumulative implications should be tested at the point when the node is first authorised.

Why the ten examples developed semi-organically

- 2.3.10** Most of the ten examples did not begin as consciously planned renewable-energy hubs. Several originated in the era of large, centralised power stations or were established as components of a transmission network designed around a very different generation mix. Later projects arrived through separate commercial decisions, connection applications, network reinforcements and planning or development-consent processes. The resulting clusters are therefore “semi-organic”: they reflect the continuing attractiveness and adaptability of an existing transmission node rather than a single, comprehensive consent for the eventual totality of development.
- 2.3.11** Cottam, West Burton and High Marnham illustrate a particular form of evolution. Infrastructure originally associated with conventional generation remained valuable after generating capacity closed or changed, and the availability or release of transmission capacity helped to make the locality attractive to later solar, storage and network projects. Bicker Fen, Killingholme and Lackenby show a related process in which successive offshore, interconnector, storage or reinforcement projects converged on established high voltage infrastructure. Sundon and East Claydon demonstrate that the same phenomenon is not confined to former power-station landscapes.
- 2.3.12** This history matters because each later proposal could be presented as an individual response to the network circumstances then prevailing. No single early decisionmaker necessarily had before it the final pattern now visible on the ground. The cumulative environmental consequence emerged from a sequence of rational, separately

promoted projects, each benefiting from a node whose earlier establishment had reduced an important technical and locational barrier.

- 2.3.13** The examples consequently expose a structural risk in project-by-project assessment. If the first consent treats the substation only as a component required by its first user, and later consents treat the substation as an established baseline or an unavoidable connection point, the environmental significance of creating the node itself may never receive full scrutiny. That is not an allegation of deliberate “salami slicing”; it is a foreseeable consequence of divided responsibilities and successive decision-making.

Why Great Moulton is materially different

- 2.3.14** Great Moulton would not inherit a mature industrial site, a closed power station or a historic 400 kV compound it is to all intents and purposes a greenfield site. The DCO would help create the transmission opportunity itself. The distinction is fundamental: the East Pye decision is not simply whether to use an established node, but whether to facilitate the establishment of a new, permanent and potentially expandable node in open countryside.
- 2.3.15** The starting landscape is also different. The proposed location lies within a settled agricultural area containing villages, dispersed homes, local roads and public rights of way. A new substation, line turn-ins, cable connections and associated access works would introduce a durable item of nationally significant electrical infrastructure into that receiving environment. Later solar arrays, BESS compounds, project substations, cable corridors and further grid works would not merely intensify an established energy landscape; they could change the identity and perceived function of a wider rural area.
- 2.3.16** The temporal setting is also different. The historic examples accumulated infrastructure during periods when the number, type and pace of connection proposals were not the same as the present transition. Great Moulton would begin life amid policy led decarbonisation, large scale storage deployment, strategic transmission reinforcement and a reformed connections process intended to identify ready and strategically aligned projects. Under the current NESO framework, Gate 2³³ projects may secure a confirmed connection date, connection point and queue position.
- 2.3.17** The information position may therefore be better than it was when the older substations were first established. NGET should be able to explain its design assumptions, the minimum East Pye connection requirement, anticipated busbars, bays and circuits, ultimate physical capability, expansion land, access provision and the permanent network function intended for the Great Moulton asset. Objection 3 separately addresses the project and TEC register evidence which should be obtained from NESO.
- 2.3.18** The regulatory opportunity is different too. East Pye is being examined through the DCO process with an Environmental Statement and an Examining Authority able to ask written questions, request evidence and test cumulative effects. The Planning Inspectorate’s current advice³⁴ advocates a staged cumulative-effects assessment and requires transparent identification, screening and assessment of other development. It is appropriate to use that opportunity before the new node becomes part of the baseline against which later proposals are judged.

The examination consequence

- 2.3.19** The fact that the precise scale and timing of later use of the node cannot yet be predicted does not remove the need to examine its enabling character. The present question is more basic: whether the DCO would create infrastructure whose physical and electrical configuration makes later connections materially more feasible, and whether that possibility is sufficiently credible to affect alternatives, mitigation and the planning balance.
- 2.3.20** The key distinction is between prediction and risk appraisal. I do not ask the Examining Authority to find that all potential projects will proceed. I ask it to determine whether the new node creates a credible pathway to additional development; whether the Applicant's assessment captures the reasonably foreseeable part of that pathway; and whether residual uncertainty is sufficiently material to affect alternatives, mitigation, requirements and the planning balance.
- 2.3.21** The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017³⁵ require the Environmental Statement to address direct and indirect, secondary and cumulative effects where relevant. The Planning Inspectorate's cumulative effects advice is directed to projects that are proposed but not yet part of the baseline, using a staged process to identify and assess the "other development" capable of interacting with the application project.
- 2.3.22** A proportionate examination should therefore distinguish at least between:
- (i) the minimum technically necessary NGET infrastructure required to connect East Pye alone;
 - (ii) the configuration actually proposed in the DCO; and
 - (iii) the reasonable physical expansion or multi-user capability of that configuration.
- 2.3.23** Any credible named project scenario established through Objection 3 can then be assessed in cumulative and in-combination terms in Objection 4, without confusing that project-specific exercise with the threshold question addressed here.
- 2.3.24** This is also relevant to alternatives. If the proposed design materially exceeds East Pye's demonstrated requirements, or preserves bays, land or circuitry for future connections, the Applicant should explain why that configuration is necessary and how its wider environmental consequences have been considered. Conversely, if NGET's evidence establishes that the node will be physically and electrically constrained to East Pye, that evidence would narrow the concern. Either outcome requires evidence rather than assertion.

Reasoned conclusions

2.3.25 The distinction between the ten mature comparators and the proposed new Great Moulton node leads to the following consolidated conclusions:

Table 2.2: Distinction between comparator grid substations identified in Table 2.1 and the proposed Great Moulton (Long Stratton) 400kV grid substation

Key consideration	Reasoned conclusion
The examples are evidential, not deterministic	They demonstrate a credible connection led pathway but do not prove that any particular later project will occur.
A new 400 kV node is enabling infrastructure, not necessarily a development endpoint	Once created or expanded, busbars, bays, line turn-ins, access and connection capacity can reduce the technical or financial barriers facing later generation, storage, demand or network connections.
Creation or release of capacity can direct later development	Cottam, West Burton and High Marnham show how available transmission capacity can make the same locality attractive to successive independently promoted projects.
Great Moulton would create a materially new baseline	Unlike most comparators, the DCO would help establish a new permanent 400 kV node in a predominantly rural and comparatively unindustrialised landscape. Its environmental significance should therefore be examined before it becomes established infrastructure for later applications.
The effects are not confined to the fenced substation compound	The relevant development pattern can include dispersed solar and BESS sites, project substations, underground cables, overhead-line works, access and reinforcement extending well beyond the immediate node.
Modern evidence permits a more prospective assessment	Current network planning, connection agreements and Gate processes should allow NGET and NESO to describe the intended configuration and credible connection background. Uncertainty warrants proportionate scenarios, not a zero-development assumption.
The closest comparators support a credible clustering risk	High Marnham, East Claydon, Sundon and the Cottam/West Burton corridor show how established or newly enhanced rural 400 kV nodes can attract several independently promoted generation and storage projects.
Overall examination implication	The evidence supports treating the proposed Great Moulton (Long Stratton) substation as creating a credible future energy-hub risk. The Examination should establish whether its capacity, configuration, permanence and anticipated connection role make additional development sufficiently foreseeable to require assessment now.

2.3.26 Taken together, the comparative evidence supports a precautionary but proportionate conclusion: the new Great Moulton node should not be assumed to be a finite East Pye only endpoint. Its enabling capability, reasonable expansion scenario and capacity to

alter the development baseline should be established and assessed now, while Objection 3 tests the project-specific evidence and Objection 4 addresses the resulting cumulative and in-combination effects. The institutional, financial and locational considerations summarised in Appendix 2.3 provide an additional reason why that future-use question should be tested directly with NGET.

2.4 How Recent Large Solar DCOs Have Treated Solar Proliferation

2.4.1 The comparison in Appendix 2.4 examines Cottam, West Burton, Green Hill, The Drovers, Lime Down and Light Valley, Sunnica and Mallard Pass. At this stage, East Pye is deliberately excluded from the comparator group so that the exercise does not become circular. The purpose is narrower: to identify whether recent large solar DCOs have considered the cumulative effect of multiple solar projects and, separately, whether they have considered the prospect that the grid connection used or created by the scheme could facilitate a later proliferation of solar development.

2.4.2 The first proposition is well supported. Recent solar DCO practice routinely undertakes cumulative effects assessment against identified existing, approved, submitted and reasonably foreseeable development. The Planning Inspectorate's current advice expressly treats "other existing and/or approved development" as including projects that are reasonably foreseeable, and expects a staged process of long-listing, short-listing, information gathering and assessment³⁶.

2.4.3 Cottam and West Burton provide the clearest example. Those examinations did not treat the schemes in isolation. The Examining Authorities required a Joint Report on Interrelationships covering Cottam, West Burton, Gate Burton and Tillbridge; updated information was reviewed as adjacent applications matured; and further technical notes considered additional schemes. In West Burton, the Recommendation Report records concerns about the combined effects of the neighbouring solar NSIPs and confirms that cumulative and in-combination effects with those schemes were a specific examination issue³⁷.

2.4.4 That is a substantial cumulative assessment, but it is not the same as a prospective proliferation assessment. The exercise asked, in effect, "what are the combined effects of these known or sufficiently foreseeable schemes?" I can find no evidence that either examination separately asked whether the continuing availability, reuse or reinforcement of the Cottam/West Burton transmission connection would itself make a further generation of presently unidentified solar projects more likely. That omission is less striking there because both projects connect into established former power-station transmission locations: the decisionmaker was dealing with the reuse of an existing energy node rather than authorising a wholly new greenfield 400 kV node.

2.4.5 Green Hill likewise contains a formal cumulative effects assessment of the Scheme with other developments, including topic specific assessments and identified significant cumulative effects. Its scoping material expressly contemplated other solar projects as cumulative developments³⁸. The material reviewed does not, however,

identify a separate assessment of future solar proliferation caused or facilitated by the grid connection itself.

- 2.4.6** The Drovers goes further in one useful respect. Its Environmental Statement identifies significant cumulative effects with the adjacent High Grove Solar scheme and also considers other named projects in relation to agricultural land and socio-economic effects. The promoter records active coordination with High Grove³⁹. Again, this is evidence of serious treatment of a known solar cluster, but it remains an assessment of identified schemes rather than of additional development that might later be attracted by the transmission opportunity.
- 2.4.7** Lime Down and Light Valley adopt the same broad model. Lime Down's Environmental Statement assesses inter-project cumulative effects against a long list of plans and projects, including other renewable developments; Light Valley's 2026 Environmental Statement assesses inter-project effects with other proposed and committed plans and projects and is supported by a cumulative-development long list.^{40,41} Both therefore address the conventional cumulative question. I have not identified an assessment in either case of a further class of development generated by the existence or future re-use of the grid connection itself.
- 2.4.8** Sunnica and Mallard Pass point in the same direction. Sunnica's cumulative methodology included existing and approved development, applications and projects described as reasonably foreseeable, and its grid connection was to the existing Burwell National Grid Substation⁴². Mallard Pass undertook a staged cumulative assessment and, during Examination, its cumulative long list was expanded following local-authority concern that additional solar NSIPs outside the original search area had not been captured; it connects to the existing National Grid Ryhall Substation⁴³. These are useful examples of examinations responding to an evolving solar pipeline, but neither is a close analogue for the creation of a new greenfield transmission node.
- 2.4.9** The comparative evidence therefore reveals a recurring boundary in DCO assessment practice. Cumulative effects assessment is generally project led: it starts with schemes that are existing, approved, submitted or otherwise sufficiently foreseeable to be identified and assessed. It does not ordinarily model an open ended category of hypothetical future projects. That is understandable and legally proportionate; an Environmental Statement is not required to predict every development that might conceivably occur.
- 2.4.10** The position changes, however, where the project being authorised may itself alter the development opportunity. The EIA Regulations require the description of likely significant effects to cover direct, indirect, secondary and cumulative effects, while Planning Inspectorate guidance recognises reasonably foreseeable development and, in earlier EIA advice, expressly required separately consented related or consequential development to be assessed where appropriate⁴⁴. The relevant question is therefore not whether East Pye must assess unknown projects merely because they are imaginable. It

is whether the creation of a permanent, expandable 400 kV node is itself an enabling consequence of the DCO from which additional development is sufficiently foreseeable to require examination.

2.4.11 On the comparator evidence, failure to undertake such an assessment at Cottam, West Burton, Sunnica or Mallard Pass cannot simply be transplanted to Great Moulton as precedent for doing nothing. Cottam, West Burton, Sunnica and Mallard Pass all use or extend established transmission locations. Great Moulton is materially different because the DCO would help create the connection node and a new transmission baseline in open countryside. The potential omission is therefore more acute: once consented, the node could be treated by later promoters and decision-makers as existing infrastructure, even though its role in changing the geography of future development opportunity had not been tested when it was first authorised.

2.4.12 This does not mean that the Examining Authority should assume a fixed number, location or capacity of future solar projects. A proportionate response would be to establish from NGET and NESO: (i) the minimum configuration needed for East Pye alone; (ii) spare or expandable physical capability; (iii) whether other connection interests have already been considered; and (iv) whether a reasonable scenario of additional solar/BESS connections should be tested. If the evidence demonstrates that no material multi-user or expansion pathway exists, the concern can be narrowed. If it demonstrates the opposite, the environmental consequences should not be deferred merely because the later projects would require separate consents.

2.4.13 The comparison therefore strengthens, rather than weakens, Objection 2. Recent DCOs demonstrate that decision makers take cumulative solar development seriously once projects become identifiable. The East Pye Examination has an opportunity to address the preceding question: whether authorising the Great Moulton node is likely to create the conditions in which that later cumulative development becomes more probable. Appendix 4 sets out the comparator analysis and the resulting relevance to East Pye.

2.5 What evidence there appears to be that East Pye might act as a ‘Trojan Horse’ for additional locationally adjacent RE projects to secure a grid connection which otherwise might not have been forthcoming

2.5.1 The expression ‘Trojan Horse’ is used here as shorthand for an enabling planning consequence, not as an allegation of concealment, bad faith or an undisclosed agreement between promoters. The concern is that East Pye may be the project which makes possible the creation of a new permanent 400 kV connection point at Great Moulton and that, once created, the same infrastructure may materially improve the prospects of other renewable-energy or storage projects in the immediate and wider Long Stratton area which do not presently have an equivalent connection opportunity.

2.5.2 There is a clear evidential basis for treating that possibility seriously. East Pye’s own Environmental Statement explains that a connection at Norwich Main was initially

considered but rejected because there was neither sufficient existing capacity nor an opportunity to expand that substation. National Grid then identified available capacity on the Bramford–Norwich 400 kV line and advised that a new National Grid substation would be required to connect East Pye; Great Moulton was subsequently selected as the preferred location. In other words, on the Applicant’s own account, the Great Moulton node is not pre-existing infrastructure which East Pye happens to use: East Pye is the scheme through which the new connection opportunity would be established⁴⁵.

- 2.5.3** That distinction becomes more important because the new National Grid substation is intended to remain after the generating and storage elements of East Pye are decommissioned, as part of the transmission network. The DCO would therefore do more than connect a time limited solar project. It would introduce a durable transmission asset into open countryside which could outlive the initiating project and become an established part of the baseline against which later connection proposals are considered.⁴⁶
- 2.5.4** There is also already a concentration of separate renewable-energy and storage interests in the surrounding area. The EIR request reproduced at Appendix 2.2 identifies, among other schemes or connection interests requiring clarification, Field Long Stratton BESS, Tasway Energy Park, RPC/Elmya Carnation or Gissing, Noventum Long Stratton, Enso or ‘Long Stratton 400’, Wacton Road Farm and other projects. Their inclusion does not establish that any will connect at Great Moulton, and some may prove geographically or technically unrelated; it does, however, show that the issue arises in a locality where substantial separate renewable-energy interests already exist rather than in an otherwise inactive area. The project-specific evidence is examined in Objection 3.
- 2.5.5** Tasway provides particularly relevant circumstantial evidence. Aukera states that Tasway has received only a Gate 1 offer and that, because it lacks clarity over a grid connection point, its planning programme is delayed until it has better visibility of where and when it can connect. The same project material expressly acknowledges East Pye, Long Stratton BESS and Wacton Road BESS as nearby energy proposals with which it is engaging on cumulative impacts and possible collaborative benefits. That is not evidence that Tasway has a contractual right or settled intention to connect at Great Moulton. It is, however, evidence of a substantial locationally adjacent renewable-energy project whose progression is constrained by grid-connection uncertainty at the same time that East Pye proposes to establish a new permanent 400 kV node nearby⁴⁷.
- 2.5.6** The counterfactual is therefore important. I have not identified evidence in the present DCO material demonstrating that NGET would have constructed the same Great Moulton 400 kV substation, in the same location and on the same timescale, in the absence of East Pye. The Applicant’s site-selection evidence instead presents the new substation as infrastructure required to connect the scheme. If that is correct, it is reasonable for the Examination to ask whether East Pye is not merely a user of grid capacity but the project which unlocks a new local connection opportunity that might otherwise not have existed (or not have existed at this location and time).

2.5.7 The present evidence does not justify the finding that any named project will connect at Great Moulton, but it does justify targeted examination of the proposition. The Applicant, NGET and NESO should therefore be asked to identify:

- (i) whether any other project has sought, discussed or been modelled for connection at Great Moulton, Long Stratton 400 kV or North Anglia Connection Node A;
- (ii) whether the proposed substation contains capacity, bays, busbar positions, land, cable-entry arrangements or circuitry beyond that required for East Pye alone;
- (iii) whether any nearby Gate 1 or Gate 2 project would become more readily connectable if the Great Moulton node is authorised; and
- (iv) whether NGET would presently have a funded or committed reason to construct the Great Moulton node if East Pye were not consented.

2.5.8 Those answers would allow the Examining Authority to distinguish a genuine East Pye-only connection from a DCO which may have the practical effect of opening a new renewable-energy connection location.

2.5.9 Accordingly, the ‘Trojan Horse’ concern should be treated as an Examination testable hypothesis rather than rhetoric. The combination of a new greenfield 400 kV node created specifically to connect East Pye, its intended permanent retention, the existing cluster of nearby renewable-energy proposals, and at least one substantial adjacent project whose advancement is presently constrained by uncertainty over its connection point is sufficient to require an evidenced response.

2.5.10 If NGET and NESO can demonstrate that the node is physically, electrically and contractually incapable of materially assisting other projects, the concern would be narrowed. If they cannot, the reasonably foreseeable environmental consequences of creating that opportunity should be assessed before the DCO is granted.

2.6 Status of NGET information request

2.6.1 On 10 August 2026 I prepared an Environmental Information Regulations request⁴⁸ to NGET directed specifically to the purpose, specification, alternatives, ultimate capability, Node A relationship, design status, permanent role and strategic context of the Great Moulton (Long Stratton) substation. The request records that the DCO material contemplates a minimum one-circuit connection as well as single- and double-turn-in arrangements and asks NGET to explain any infrastructure beyond that minimum. As already mentioned, a copy of that is attached as Appendix 2.2. As of the date of this document (6th October 2026) no response has been received, and NGET have indicated a time extension for a response beyond the initial 20 working days.

2.6.2 The objection is therefore necessarily provisional on those matters which only NGET can authoritatively confirm. It should be updated when the EIR response is received. The purpose of doing so is not to shift the evidential burden onto the objector, but to ensure

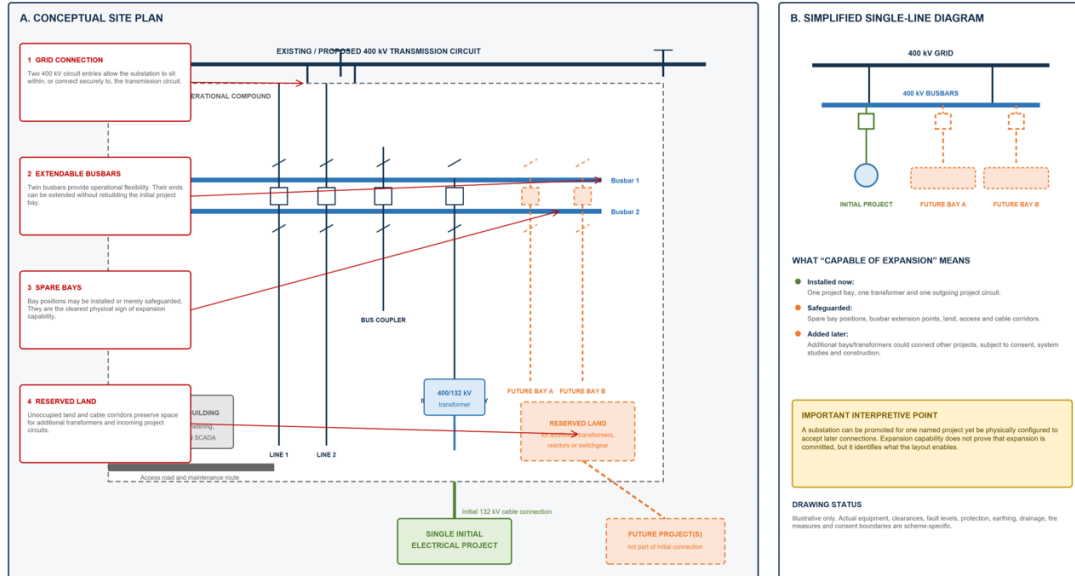
that the Examining Authority has direct evidence from the future owner and operator of the permanent transmission asset before reaching conclusions about its role, configuration and wider enabling consequences. The same response should, so far as the information held permits, assist the Examination in testing the institutional, investment and site-opportunity considerations summarised in Appendix 2.3.

Appendix 2.1

Drawing 2.1: How a 400kV grid substation providing a grid connection for a single project can allow for potentially multiple additional connections in time

ILLUSTRATIVE 400 kV SUBSTATION — SINGLE INITIAL PROJECT WITH EXPANSION CAPABILITY

Conceptual plan and simplified single-line arrangement | Not to scale | For exploratory and planning use



Appendix 2.2: Copy of my EIR Request to NGET

EIR request to NGET – 18 August 2026

Subject: Environmental Information Regulations 2004 request – proposed Long Stratton/Great Moulton 400 kV substation, North Anglia Connection Node A and related connections

Date: 18 August 2026

Dear National Grid Electricity Transmission,

Environmental Information Regulations 2004 request

I request environmental information under the Environmental Information Regulations 2004 (EIR) concerning the proposed Long Stratton 400 kV National Grid substation south of Great Moulton, South Norfolk; the connection-site designations 'North Anglia Connection Node A' and 'Long Stratton 400kV'; and the relationship of those assets to East Pye Solar and other electricity projects.

The proposed substation forms part of the East Pye Solar DCO application EN0110014. The submitted Grid Connection Statement identifies National Grid Electricity Transmission plc (NGET) as the body expected to undertake the detailed design and construction of, and subsequently own and operate, the new National Grid substation and the works connecting it to the existing Norwich Main–Bramford 400 kV overhead line. That permanent NGET infrastructure is distinct from East Pye Solar Limited's project substations, battery energy storage system and cabling.

The East Pye documents describe a National Grid compound of up to approximately six hectares, potentially including a double-busbar arrangement and a turn-in of one or both existing 400 kV circuits. They also indicate that the National Grid substation would remain part of the transmission system after the generating and storage development is decommissioned. The published NESO connection registers use the designations 'North Anglia Connection Node A 400kV', 'North Anglia Connection Node A 132kV Substation' and 'Long Stratton 400kV' for a number of projects. I do not assume that those designations are interchangeable; a principal purpose of this request is to establish their identity and physical and electrical relationship from information held by NGET.

This request is for recorded information held by NGET as at 18 August 2026, including information held on NGET's behalf by its employees, project teams, consultants, contractors or agents. It includes final, draft and superseded records where they evidence the evolution of the location, purpose, design or intended use of the proposed infrastructure. I am not asking NGET to create new analysis, give a planning opinion or speculate where no recorded information is held.

1. Identity, purpose and specification of the proposed substation

Please provide reports, technical notes, engineering assessments, option papers, internal recommendations, decision records, drawings, meeting records and correspondence which identify:

- a. the purpose or purposes for which the Long Stratton/Great Moulton substation has been specified;
- b. the elements required solely for East Pye Solar's proposed connection of up to 500 MW export and 500 MW import;
- c. any elements intended to provide a wider transmission-network, resilience, operational, maintenance, future-development or multi-user function;
- d. whether NGET has specified or required a double-busbar arrangement and the recorded reasons for doing so;
- e. whether NGET has specified or required a turn-in of both circuits of the Norwich Main–Bramford 400 kV line, and the technical, operational, resilience, maintenance or future-network reasons recorded for that requirement; and
- f. any difference between the minimum connection required for East Pye and the maximum or preferred NGET configuration now being safeguarded or assessed.

2. Connection and location alternatives

Please provide recorded information concerning alternatives considered for connecting East Pye and/or establishing a connection node in this part of South Norfolk, including:

- a. a single-circuit turn-in, tee connection, smaller switching station, single busbar or other reduced configuration;
- b. alternative footprints, layouts, orientations or locations for the proposed substation;
- c. air-insulated and gas-insulated switchgear options;
- d. connection at Norwich Main, Yaxley, Bramford or another existing or proposed transmission substation;
- e. a connection route or network solution not dependent on a new 400 kV substation at Great Moulton; and
- f. the technical feasibility or network desirability of more than one new 400 kV connection node between Norwich Main and Yaxley, including any assessment of whether North Anglia Connection Node A and Long Stratton/Great Moulton could or should exist as separate assets.

For each option for which information is held, please provide the recorded reasons for retention, preference or rejection, including technical, cost, programme, land, environmental, operational and resilience considerations.

3. Physical and electrical capability, expandability and safeguarded provision

Please provide recorded information identifying:

- a. the number and type of connection bays proposed initially, and the number required solely for East Pye;
- b. the maximum number of bays, circuits or customer connections that the proposed layout and site could accommodate, with or without later extension;
- c. spare or extendable busbar positions, bays, cable-entry positions, transformer positions, control facilities, access, drainage, landscaping, undeveloped land or other provision for subsequent connections;

- d. the anticipated electrical capability after East Pye is connected, distinguishing physical equipment capability, contracted capacity and capacity that may become available only following reinforcement;
- e. whether generation, BESS, demand, distribution or transmission connections could be accommodated without material enlargement of the proposed compound;
- f. any provision for a 132 kV substation, supergrid transformers, Grid Supply Point or transmission-to-distribution interface; and
- g. any maximum-development, ultimate-layout or phased-layout drawings or schedules prepared for the site.

I recognise that spare physical capability is not the same as immediately available connection capacity. The request seeks records which allow those concepts to be distinguished.

4. North Anglia Connection Node A and Long Stratton designations

Please provide recorded information which establishes:

- a. whether 'North Anglia Connection Node A 400kV' is the same proposed asset as, forms part of, or depends upon the Long Stratton/Great Moulton 400 kV substation described in the East Pye DCO;
- b. whether 'Long Stratton 400kV' refers to that same asset or to a different existing or proposed asset;
- c. the proposed approximate location of each different asset, if the designations are not synonymous;
- d. the location and relationship of 'North Anglia Connection Node A 132kV Substation' to the proposed 400 kV infrastructure;
- e. when NGET first adopted, received or became aware of each designation and any recorded explanation for changes in naming;
- f. whether Node A is regarded as a single-customer connection point, multi-user node, collector point, transmission switching node, Grid Supply Point or combination of functions; and
- g. whether the 400 kV and 132 kV elements are being planned or safeguarded as a coordinated complex sharing land, access, busbars, transformers, cable corridors, environmental mitigation or expansion provision.

If these designations are unrelated to the proposed Great Moulton asset, please state that clearly and provide any information held identifying the alternative asset and its approximate location.

5. Other projects and connection interests

Please provide recorded information showing whether NGET has considered any contracted, proposed or reasonably anticipated connection other than East Pye when locating, designing, specifying, safeguarding land for, programming or assessing the proposed Long Stratton/Great Moulton substation or Node A infrastructure.

Without asserting that every entry represents a geographically defined project near Great Moulton, the projects of particular interest are:

1. East Pye Solar – combined solar generation and BESS;
2. Field Long Stratton – standalone BESS promoted by Field Energy;
3. Tasway Energy Park – solar generation and BESS promoted by Aukera Energy;
4. RPC/Elmya Carnation or Gissing – proposed solar generation and BESS in the Gissing area;
5. Noventum Long Stratton – solar-led connection project;
6. Enso or ‘Long Stratton 400’ – technology mix and project location to be clarified insofar as held;
7. GF Norwich BESS;
8. Swainsthorpe – technology mix and project location to be clarified insofar as held;
9. Intwood Farm BESS;
10. Wacton Road Farm – including whether this is the consented Wacton/Forncett BESS or a separate project;
11. Wymondham Road Farm; and
12. Old Stoke Road BESS.

For each listed project, and any other project which NGET has considered in connection with these assets, please provide information held on:

- a. the customer/project name used in NGET records, promoter, technology and contracted or proposed import/export capacity;
- b. the nature and date of any enquiry, application, modification, offer, accepted offer, feasibility discussion or other expression of interest involving NGET;
- c. the connection site and voltage identified in NGET records;
- d. the project’s current connection status, including whether active, contracted, Gate 1, Gate 2, under assessment, deferred, paused, terminated, withdrawn, superseded or otherwise not progressing;
- e. whether the project has supplied a geographically specific project site, Original Red Line Boundary or equivalent boundary, and the approximate location or parish of that site;
- f. whether accepted Gate 2 land-rights evidence relates to the generation/storage site, cable route, connection corridor, substation land or a combination of those land interests;
- g. any indicative cable route, connection corridor or point of connection held by NGET;
- h. whether bays, busbar positions, transformer capability, cable-entry positions, land or other physical provision have been identified, allocated, reserved, safeguarded or assumed;
- i. whether the project influenced the proposed substation’s size, configuration, busbar arrangement, number of bays, land requirement, access, phasing or expansion capability;
- j. whether its connection assumes or depends upon construction of the proposed Great Moulton 400 kV substation, and whether another connection solution is recorded if that substation is not built;
- k. whether it could connect if East Pye were not consented or did not proceed; and

l. whether it relies upon land, rights, compulsory-acquisition powers or works proposed to be authorised or secured through the East Pye DCO.

Please also provide any record showing the total number and aggregate capacity of connections NGET currently understands could use these assets, distinguishing so far as held between contracted/Gate 2 projects, Gate 1 projects, other interests and projects no longer progressing. I am not asking NGET merely to reproduce a NESO register, but for NGET's own recorded information about the physical works and connection arrangements for which it is or may be responsible.

6. Project locations, land information and confidentiality

For projects whose public register entry does not reveal a precise development location, please provide the least geographically aggregated location information NGET holds which can be disclosed without revealing genuinely confidential detail. This may include parish, approximate coordinate, search area, distance or direction from the proposed connection point, redacted boundary plan, or confirmation that no geographically defined site has been supplied to NGET.

Where a site boundary, route or land-rights record is held but NGET considers the full document excepted, please consider partial disclosure by redacting landowner names, commercial terms and other protected information while retaining the project location, boundary geometry, general status and environmental context. If even approximate location is withheld, please identify the EIR exception relied upon and explain the public-interest balance.

7. East Pye DCO land, powers, agreements and delivery dependency

Please provide recorded information identifying:

- a. the land and rights within the East Pye Order limits which NGET requires for the permanent substation, overhead-line works, access, construction, drainage, landscaping, cables and future operation;
- b. whether those land interests or powers are sufficient for NGET's current preferred and ultimate layouts, including any multi-user or 132 kV provision;
- c. any agreement, heads of terms, interface arrangement, technical approval, design acceptance or other commitment between NGET and East Pye Solar Limited relevant to delivery of the NGET works;
- d. which aspects of location, layout, access, turn-in arrangement, equipment, programme, ownership, funding and delivery remain unagreed or conditional;
- e. whether NGET could deliver the proposed substation without East Pye obtaining the DCO and its associated land or powers;
- f. whether NGET would retain or exercise any land or rights secured through the DCO if East Pye did not proceed; and
- g. any recorded contingency or alternative for East Pye and for other connection customers if the Great Moulton substation is delayed, reduced, relocated or not constructed.

8. Present design, programme and decision status

Please provide records showing the status as at 18 August 2026 of NGET's consideration, specification or approval of the substation's location, footprint, orientation, access,

construction compound, single- or double-circuit turn-in, busbar configuration, bays, permanent and temporary pylons, equipment heights, landscaping, drainage and indicative East Pye DCO layout.

Please distinguish matters that are required, agreed, preferred, provisional, illustrative or subject to detailed design, and provide the latest programme or milestone record for design, land acquisition, technical sanction, funding, consents, procurement, construction, energisation and connection. Please also provide any recorded assessment of the consequences for East Pye or other customers if those milestones are not achieved.

9. Permanent and strategic network role

Please provide recorded information explaining:

- a. the anticipated network function of the substation after East Pye is decommissioned or if East Pye does not proceed;
- b. whether permanent retention assumes, anticipates or facilitates other connections or network functions;
- c. whether any mechanism exists for removal if there is no continuing network requirement;
- d. when the Long Stratton/Great Moulton location was first identified as a possible 400 kV node and whether that occurred solely in response to East Pye;
- e. whether and when its role evolved from an East-Pye-specific connection solution to a potential multi-user or strategic node;
- f. any strategic assessment of its relationship with Norwich Main, Yaxley, Bramford, Norwich–Tilbury or other planned East Anglia transmission works; and
- g. any recorded assessment of whether a suitably configured Long Stratton/Great Moulton substation could act as the single new 400 kV connection node for the relevant projects between Norwich Main and Yaxley.

10. UK Power Networks and distribution interface

Please provide correspondence, meeting records, studies or assessments between NGET and UK Power Networks concerning:

- a. a future transmission-to-distribution connection or Grid Supply Point;
- b. distribution reinforcement in South Norfolk;
- c. a 132 kV substation or supergrid transformer provision associated with Node A; and
- d. the potential for the NGET substation to facilitate further generation, storage or demand connections to the distribution network.

If no such information is held, please confirm that position.

11. Cumulative environmental assessment and coordination

Please provide recorded information showing whether NGET has undertaken, commissioned, reviewed or contributed to any assessment of the cumulative environmental effects of:

- a. the permanent NGET substation, overhead-line modifications, access and associated works together with East Pye's substations, BESS, cabling and solar development;

- b. the NGET infrastructure together with Field Long Stratton, Tasway, the Wacton/Forncett BESS, the Gissing proposal and/or any other known connection project;
- c. the progressive concentration of transmission, distribution, generation, storage and cable infrastructure around Great Moulton, Wacton and Long Stratton; and
- d. the landscape and visual, land-use, traffic, noise, drainage, ecological, heritage, agricultural and community effects of the maximum reasonably foreseeable build-out associated with the proposed node.

Please include any correspondence or meeting record with East Pye Solar Limited, NESO, UKPN, the Planning Inspectorate, South Norfolk Council, Norfolk County Council or another project promoter about the cumulative assessment, the list of projects to be assessed, the division of assessment responsibility, or the risk that related infrastructure is assessed through separate consent processes without an assessment of the combined outcome.

Please also provide any record explaining why a known project was included in or excluded from the cumulative-effects assessment supporting the East Pye DCO, where NGET was consulted or supplied information relevant to that decision.

12. Records, searches and information held elsewhere

The record types sought include reports, drawings, option and design studies, connection and modification studies, technical specifications, sanction papers, risk registers, programmes, meeting minutes, presentations, correspondence and material exchanges with NESO, East Pye Solar Limited, other customers, consultants and public bodies. Relevant search terms are likely to include 'Long Stratton', 'Great Moulton', 'North Anglia Connection Node A', 'Node A', 'East Pye', the project names in section 5, and corresponding customer or connection-agreement references.

Where information within scope is held principally by NESO or another public authority, please apply Regulation 10: either transfer the relevant part of the request or identify the authority believed to hold it and provide its contact details. I would prefer to be consulted before any transfer involving disclosure of my personal contact details.

Form of disclosure and handling of exceptions

I prefer electronic disclosure. Where information is contained in existing records, I seek copies of those records rather than a newly prepared narrative. Native or searchable formats are preferred for spreadsheets, drawings and schedules where reasonably practicable.

If NGET considers that any information engages an EIR exception, please identify the information withheld, specify the precise exception, explain any required public-interest test, and disclose the remainder by separation, redaction, anonymisation or aggregation. Please distinguish information not held from information held but withheld. Where the existence of a specifically named customer or project is itself said to be protected, please address whether confirmation of broad technology, capacity, status, connection location and approximate geography can nevertheless be given.

If any part is considered too general or manifestly unreasonable by reason of burden, please provide advice and assistance under Regulation 9 and invite refinement rather than refusing the

request as a whole. Please identify the record systems, date ranges or question groups which create the burden and indicate what narrower formulation would allow disclosure.

Priority and staged response

To facilitate a proportionate search, my priorities are:

Priority 1: sections 4 and 5 – the identity of Node A/Long Stratton, the projects expected to use it, their approximate locations and their dependency upon the Great Moulton substation;

Priority 2: sections 1, 3, 7 and 8 – the purpose, capacity, design, land/powers, agreement status and delivery programme of the NGET works; and

Priority 3: sections 2, 6 and 9–12 – alternatives, land/location detail, strategic role, distribution interface, cumulative assessment and supporting records.

If the full request cannot be answered within the normal period, I invite NGET to disclose Priority 1 first, followed by the remaining information on a staged basis. This prioritisation does not withdraw the other parts of the request.

Timing of response

Regulation 5(2) requires environmental information to be made available as soon as possible and no later than 20 working days after receipt. If received on 18 August 2026, I calculate the normal response date as 16 September 2026, allowing for the summer bank holiday on 31 August.

If NGET considers the complexity and volume make it impracticable to comply within 20 working days and proposes to rely on Regulation 7, please notify me within the initial period, explain the reasons and confirm the revised deadline. A full 40-working-day period from receipt on 18 August 2026 would end on 14 October 2026.

Purpose and public interest

I am a local householder and an Interested Party in the East Pye Solar DCO examination. I intend to place the substance of this request and relevant information from NGET's response before the Examining Authority. The request is intended to establish, from contemporaneous records, the purpose, scale, configuration, deliverability, residual capability and wider environmental and network role of permanent infrastructure proposed in the countryside south of Great Moulton.

There is a significant public interest in enabling the Examination to distinguish infrastructure required solely for East Pye from infrastructure which provides or safeguards a wider multi-user function; to understand whether additional projects have geographically defined sites and depend upon the same node; and to assess the reasonably foreseeable cumulative environmental implications before permanent land and powers are authorised. Disclosure, with proportionate redaction where necessary, would reduce uncertainty and assist informed public participation and decision-making.

Yours faithfully,

Rob Shipway

(Address Supplied to NGET but redacted in this document)

Appendix 2.3

Why NGET may have reasons to facilitate or accommodate further connections at Great Moulton (Long Stratton)

This Appendix does not suggest that NGET can unilaterally choose which projects connect, or that it would promote development irrespective of planning, environmental, technical or regulatory constraints. NESO leads the reformed connections process and individual projects require their own consents. The narrower point is that, if the Great Moulton 400 kV node is created, there are identifiable reasons why additional use of an existing and expandable transmission asset may accord with NGET's institutional and commercial interests. Those reasons are relevant when judging whether an East Pye-only future is a safe assumption.

(a) Cultural and institutional: delivering the electricity transition

NGET's core business is to develop and operate the transmission network needed to connect generation and demand. In the present policy environment that role is inseparable from the rapid growth of renewable generation, storage and electrification. National Grid describes its transmission role as supporting the UK's clean energy goals and, in the reformed connections process, NGET is assessing, developing and delivering transmission solutions and connection offers for qualifying projects. Once a new 400 kV node exists, making efficient further use of that infrastructure can therefore sit comfortably with the organisation's strategic culture and delivery role. This does not mean that NGET has a policy of creating an "energy hub" at Great Moulton; it means that facilitating technically and strategically justified connections would not be contrary to its institutional purpose.

(b) Financial: regulated investment and returns

NGET is a regulated monopoly business within the publicly listed National Grid group. Ofgem's RIIO framework is intended to fund efficient network investment while allowing an appropriate return. National Grid's own investor material presents network investment as central to long-term value creation and reports substantial continuing capital investment. It would therefore be wrong to assume that the owner of an established transmission node is financially indifferent to efficient additional investment associated with new connections, reinforcement, bays, busbars or related network works. This is not an allegation that NGET would manufacture unnecessary demand or pursue investment that Ofgem had not allowed; it is simply a recognition that, where connection demand and regulatory approval exist, network expansion can be consistent both with NGET's public-service function and with the commercial interests of its parent group and investors.

(c) Opportunity: an established node can make surrounding sites more connectable

The creation of the Great Moulton substation would also alter the practical geography of opportunity. A new 400 kV connection point, with established access, line turn-ins, busbars, cable entry arrangements and potentially expandable land, can reduce an important technical and locational barrier for later generation, BESS, demand or network projects. The comparative evidence in section 2.3 shows that this has occurred around other transmission nodes. At Great Moulton the significance is greater because the node would be newly introduced into open

countryside rather than inherited from a mature power-station or industrial site. The Examination should therefore establish whether NGET sees the locality as capable of accommodating further connections and, if so, what physical, electrical or land constraints would genuinely limit that possibility.

Overall implication for the Examination

The three factors should be considered together rather than as separate allegations of motive. They describe a rational set of circumstances in which further use of the Great Moulton node could be attractive or efficient: it could assist delivery of renewable and low-carbon connections; it could support regulated network investment; and it could exploit the practical opportunity created by an existing 400 kV asset. The relevant examination question is therefore not whether NGET presently intends to “invite” particular projects, but whether the creation and configuration of the node would make further connections a reasonably foreseeable outcome which should influence the environmental assessment, alternatives, mitigation and planning balance now.

Sources for Appendix 2.3

1. National Grid Electricity Transmission, “Connections Reform – the future of connections”, 25 August 2026: NGET describes its responsibility for assessing, developing and delivering transmission solutions and producing connection offers as part of the reformed connections process.
2. National Grid Electricity Transmission, “How we procure and deliver infrastructure”, 16 January 2026: NGET describes its role in building a resilient, future-ready transmission network supporting the UK’s clean-energy goals and connecting customers to the network.
3. National Grid plc, Annual Report and Accounts 2025/26 and Investors material: National Grid describes network investment as critical to resilience, cleaner energy and growing demand, and as part of its long-term value-creation proposition.
4. Ofgem RIIO price-control framework; see also footnotes 2 and 3 in section 2.2 of this objection. The framework regulates allowed revenues, investment incentives and outputs for monopoly transmission businesses.
5. See section 2.3 and Table 2.1 of this objection for comparative evidence of connection-led clustering around established 400 kV nodes.

Appendix 2.4

Recent large solar DCOs: treatment of cumulative solar development and relevance to East Pye

The table distinguishes conventional cumulative-effects assessment of identified projects from the separate question whether the grid connection itself was examined as a potential catalyst for later, as-yet-unidentified solar development. East Pye is excluded from the comparator rows and is addressed only in the final relevance column.

Project	Treatment of other solar / cumulative development	Was grid-enabled future proliferation examined?	Relevance to East Pye
Cottam Solar Project	Very extensive. ExA required a joint interrelationships report with West Burton, Gate Burton and Tillbridge, plus later review/technical material as neighbouring schemes progressed. ⁴⁹	No clear separate assessment identified. The work assessed known or sufficiently foreseeable schemes and shared grid/corridor interactions.	Strong evidence that solar clusters merit active examination once identifiable; weaker precedent on the enabling question because Cottam re-uses an established former power-station transmission node.
West Burton Solar Project	Very extensive. Recommendation Report expressly addresses cumulative effects with Cottam, Gate Burton, Tillbridge and additional schemes; further technical note reviewed emerging schemes. ⁵⁰	No clear separate assessment identified of later projects induced by the continued availability of the grid node.	Same lesson as Cottam. It supports close cumulative scrutiny, but it is an existing transmission location rather than a new greenfield 400 kV node.
Green Hill Solar Farm	Formal ES cumulative assessment, with other developments identified and topic-specific significant cumulative effects; scoping material expressly considered other solar projects. ⁵¹	No separate grid-catalyst assessment identified in material reviewed.	Shows standard DCO practice captures identifiable solar development, but does not answer the Great Moulton enabling question.
The Drovers Solar Farm	Strong treatment of an emerging cluster. ES identifies significant cumulative effects with adjacent High Grove and considers other named schemes; promoter records active coordination with High Grove. ⁵²	No separate assessment identified of an open-ended future solar pipeline generated by the grid connection.	Particularly useful Norfolk comparator: demonstrates that cumulative effects can become significant where major schemes cluster, reinforcing the need to understand the mechanism that may create such a cluster at Great Moulton.
Lime Down Solar Park	Inter-project cumulative assessment based on a long list of plans/projects, including other renewable developments. ⁵³	No separate grid-enabled proliferation assessment identified. Connects to existing Melksham substation.	Limited precedent against the objection: use of an existing node differs from authorising a new transmission node.
Light Valley Solar	2026 ES includes topic-by-topic inter-project assessment and a long list of cumulative developments; assessment covers proposed/committed and reasonably foreseeable development. ⁵⁴	No distinct assessment identified of additional schemes induced by the connection itself.	Confirms current practice is project-list based. It does not establish that a new enabling node may safely be ignored.

Project	Treatment of other solar / cumulative development	Was grid-enabled future proliferation examined?	Relevance to East Pye
Sunnica Energy Farm	Cumulative assessment included existing/approved projects, applications and reasonably foreseeable development; assessment list agreed with local authorities. ⁵⁵	No distinct grid-induced proliferation assessment identified. Connection is to existing Burwell National Grid Substation.	Useful evidence of a robust conventional CEA, but not a close analogue to creation of a new greenfield transmission node.
Mallard Pass Solar Farm	Staged CEA. During Examination the cumulative long list was updated after concerns that further solar NSIPs outside the original search area had been omitted. ⁵⁶	No distinct assessment identified of future projects caused/facilitated by the grid connection. Connects to existing Ryhall substation.	Shows the assessment boundary can and should expand when the solar pipeline evolves. Existing node context again limits its value as precedent for Great Moulton.

Appendix 2.4 conclusion.

The comparison does not show a general failure to assess cumulative solar development; on the contrary, several examinations treated it carefully and updated assessments as other schemes emerged. The narrower gap is that cumulative assessment normally begins only after other projects become identifiable. Where a DCO would itself create a new permanent 400 kV node, East Pye presents a materially different question: whether that enabling change to the development baseline is sufficiently foreseeable and significant to require examination before later projects crystallise.

Objection 3 – Creation of a Great Moulton Energy Hub

Context

This objection is about whether East Pye should be examined only as a solar and storage project with its own grid connection, or whether the evidence already available points to a wider consequence: the creation of a new permanent 400 kV connection at Great Moulton which could become the focus of several other renewable-energy, battery-storage and associated electrical projects. The public connection record already contains projects linked to Long Stratton 400 kV, North Anglia Connection Node A and the immediate Great Moulton area, but important questions remain about whether those descriptions refer to the same eventual node, where some projects are actually intended to be located, how mature they are, and what information NESO holds beyond the public TEC Register. The Examination should resolve those uncertainties sufficiently to determine whether a de facto Great Moulton Energy Hub is a reasonably foreseeable consequence of the DCO. This objection identifies that potential hub and its possible geography. Objection 4 considers the associated cumulative landscape and visual consequences.

What the Examination needs to cover

I respectfully suggest that the Examination should cover:

- whether “Long Stratton 400 kV” and “North Anglia Connection Node A” describe the same proposed transmission node or separate infrastructure, and, if separate, where each is intended to be located;
- which projects presently identified in connection or planning information are live, withdrawn, superseded, reformulated or otherwise uncertain, and the current status of each under Connections Reform;
- the identity, broad development geography, Original Red Line Boundary or other land-readiness information already held by NESO or NGET for projects whose public location remains uncertain;
- which identified projects depend upon, assume or would be materially assisted by construction of the proposed Great Moulton (Long Stratton) 400 kV connection, and which could realistically connect elsewhere;
- whether the public TEC Register materially understates the project-specific information available to NESO about connection point, location, readiness, land rights, capacity and timing;
- the significance of Field Long Stratton, Tasway, Wacton Road Farm, the former RPC/Elmya Gissing entry, Noventum – Long Stratton and Long Stratton 400 in testing whether the hub scenario is reasonably foreseeable rather than merely hypothetical;
- whether the indicative 0 - 15 km connection catchment and six-quadrant framework provide a reasonable spatial basis for locating and testing the presently defined and spatially uncertain projects, without treating that exercise as a landscape-impact assessment; and
- whether the Applicant’s cumulative assessment and the Examination evidence should be updated as connection, planning and Gate positions change, so that any credible hub scenario identified here can be reflected in the cumulative landscape and in-combination assessment in Objection 4 and the wider issues addressed in Objections 5 and 6.

Questions to relevant organisations

I would suggest that the following questions should be asked of the relevant organisations so that the Examining Authority can form a properly evidenced view:

- **NESO/NGET** - Are “North Anglia Connection Node A 400 kV”, “North Anglia Connection Node A 132 kV”, “Long Stratton 400 kV” and the proposed Great Moulton (Long Stratton) NGET substation the same, overlapping or separate connection locations; what physical transmission facility and location does each designation denote; and what is the network relationship between them?
- **NESO and relevant promoters** - For each project identified in Table 3.1, what is the current project identity, promoter, technology, import/export capacity, Gate status, Connections Reform offer or countersignature status, connection point and date, land/planning position, and is the project live, withdrawn, superseded, parked or being reformulated?
- **NESO** - For each spatially uncertain project, what development geography, Original Red Line Boundary, land-rights or other readiness evidence, parish, coordinates or other locational information is held but not shown on the public TEC Register; and, where detailed information is commercially sensitive, what broad non-commercially sensitive locational information can be provided to the Examination?
- **NESO/NGET** - Which Table 3.1 projects assume, depend upon or remain technically capable of connecting to the proposed Great Moulton (Long Stratton) 400 kV substation; which could proceed through another connection point; and what aggregate contracted or Gate-qualified import/export capacity and engineering constraints would limit the number or scale of additional connections, avoiding double counting?
- **NESO** - Does the “Connection Site” shown in the TEC Register identify the electrical point of connection rather than the development site, and what consequence should that distinction have for identifying and screening cumulative development?
- **Applicant** - Which projects associated with Long Stratton 400 kV, North Anglia Connection Node A or the Great Moulton area have been included in the Environmental Statement cumulative assessment, what evidence was used to determine that list, and how will it be updated during the Examination to reflect material changes in planning decisions, Gate status, connection offers or project identity?
- **Applicant/NESO/NGET** - How should geographically uncertain projects be screened where authoritative connection or land-readiness information exists but is not visible in the public planning record; and, where information cannot be published in full, can its evidential substance be provided by redaction, broad geography, ranges or project-specific confirmation sufficient for the ExA and affected parties to understand and test the position?
- **Applicant/NESO/NGET** - Does the totality of the project and connection evidence disclose a sufficiently mature concentration of projects for a Great Moulton Energy Hub to be treated as a reasonably foreseeable scenario; if not, what evidence demonstrates that the identified project cohort is too uncertain or too weakly connected to the proposed node to require such assessment?

Formal Objection 3

I object to the East Pye Solar DCO because the evidence presently available identifies a credible and potentially substantial group of renewable-energy and storage projects associated with Long Stratton 400 kV, North Anglia Connection Node A or the immediate Great Moulton area. The Examination should therefore establish the identity, location, maturity and connection status of those projects and determine whether the DCO would facilitate the creation of a de facto Great Moulton Energy Hub. The landscape and visual implications of that identified hub scenario are addressed in Objection 4.

Reasoned justification

3.1 Introduction to the objection and its wider context

- 3.1.1** This objection forms part of a sequence of objections to the East Pye Solar DCO. Objection 1 addresses the landscape and visual effects of East Pye itself and its cumulative effects, including transportation and construction impacts, when the project is considered in isolation.
 - 3.1.2** Objection 2 then addresses the enabling mechanism: the consequences of the DCO facilitating a new permanent and potentially expandable 400 kV NGET transmission node at Great Moulton (Long Stratton), and the extent to which the existence, configuration and permanent retention of that node may make later electricity generation, storage, demand or network connections materially easier to bring forward.
 - 3.1.3** Objection 2 is concerned principally with NGET: what transmission asset NGET intends to create at Great Moulton, why it is designed as proposed, what capacity or expandability it may possess, and what future network role NGET anticipates. This Objection 3 is concerned principally with NESO and the project pipeline: what connection projects NESO knows about, what locational/readiness information it holds behind the public registers, and whether the public TEC picture understates the number, maturity or geography of projects which could seek to use the Great Moulton connection.
 - 3.1.4** The relevant question is whether connection evidence held by NESO, including information not displayed on the public TEC Register, reveals a credible cohort of existing, reformulated or prospective projects capable of translating the general proliferation risk into a de facto Great Moulton Energy Hub. Objection 4 considers the cumulative and in-combination effects of that scenario; Objection 5 addresses industrialisation of the countryside; Objection 6 the wider Norwich Main-Great Moulton-Yaxley Energy Corridor; and Objection 7 fire and hazard safety.
 - 3.1.5** This objection therefore focuses on project evidence, connection geography and the prospective hub which may result. It does not repeat Objection 2's examination of NGET's enabling role. The immediate issue is whether there is sufficient evidence of other credible projects and connection possibilities for the Great Moulton hub scenario itself to require examination.
- #### **3.2 Why this is a critical issue to the East Pye DCO**
- 3.2.1** The significance of the hub issue to the East Pye DCO is not confined to the direct environmental effects of East Pye itself. A central question is whether consent for East Pye, by securing and helping to establish the proposed permanent Great Moulton (Long Stratton) 400 kV transmission

connection, could materially alter the prospects of other renewable-energy and storage projects which are presently less advanced, spatially uncertain or constrained by grid uncertainty.

- 3.2.2** The relevant mechanism can be described without analogy. Confirmation and construction of a permanent 400 kV connection at Great Moulton could materially change the commercial and technical position of projects which are presently constrained by uncertainty over a viable transmission connection. It could reduce a strategic barrier without itself conferring planning permission, Gate 2 status, land rights or guaranteed capacity on any later project.
- 3.2.3** That possibility matters particularly for projects which are presently at Gate 1, awaiting connection reform outcomes, spatially undefined in public material, or not yet sufficiently mature to enter the planning system. Once a permanent node exists, promoters may be able to advance land assembly, environmental work, connection design and planning activity against a more certain transmission baseline. The question for this Examination is whether NESO already holds information showing that this is more than a theoretical possibility.
- 3.2.4** The issue is not that East Pye should be treated as legally responsible for every later project, nor that every project in Table 3.1 will proceed. It is whether consent for East Pye would alter the development environment in a way which makes identified but uncertain projects materially more capable of advancing. Tasway, Field Long Stratton and the large Long Stratton/Node A connection propositions illustrate different stages of that problem. Their significance should be tested from authoritative NESO evidence rather than inferred solely from a public register snapshot.
- 3.2.5** This is why the issue is critical to the East Pye Examination rather than something which can safely be left to the planning assessment of later schemes. If East Pye is the development which establishes the transmission infrastructure capable of changing the practical prospects of a wider cohort of projects, the ExA needs to understand that enabling consequence before recommending whether the DCO should be granted. Otherwise, the decision risks assessing East Pye as a substantially self-contained solar and storage project when one of its most enduring consequences may be to change which other renewable-energy developments are capable of entering active play within the Great Moulton connection catchment.
- 3.2.6** The relevant Examination question is therefore one of reasonable foreseeability and causative significance, not certainty. The ExA should establish which identified projects would remain materially constrained, delayed or commercially unattractive without the Great Moulton connection; which would become materially easier to progress if that connection is authorised and constructed; and whether the aggregate effect is sufficient for those projects and their potential cumulative consequences to form part of the decision-making context for East Pye.

3.3 Evidential Approach and Status

- 3.3.1** The existence of a project name in connection information is not equivalent to a planning permission, an allocated site or a project which will necessarily proceed. Equally, the absence of a public planning application or mapped red-line boundary does not demonstrate that a project is merely speculative. Grid-connection and land-readiness processes can materially precede public planning disclosure.

- 3.3.2** The principal purpose of this objection is therefore to identify the projects and geographical relationships which require clarification, to distinguish what is known from what remains uncertain, and to ask the Applicant, NESO, NGET and relevant promoters to provide the evidence needed to establish whether a Great Moulton Energy Hub is a reasonably foreseeable consequence of the DCO.
- 3.3.3** The analysis proceeds cautiously. References to possible project locations or connection catchments are not asserted as project sites unless the public evidence supports that conclusion. Where locations remain uncertain, the document identifies indicative search areas and explains why they are electrically and geographically plausible. The purpose is to replace avoidable speculation with evidence during the Examination.
- 3.3.4** The project list and connection position must also be treated as dynamic. Connections Reform is still being implemented and project names, Gate status, connection points, dates and contractual positions may change. The Examination should therefore work from dated schedules supplied by NESO/NGET and update the cumulative picture where material changes occur.
- 3.4 Working Assumption: One New Transmission Node between Norwich Main and Yaxley**
- 3.4.1** The spatial analysis is materially affected by the likely network architecture. As noted above, the working assumption is that the Norwich Main–Yaxley section of the 400 kV network is unlikely to accommodate both a separate North Anglia Node A substation and, in addition, a separate Great Moulton (Long Stratton) transmission substation serving the same broad connection function. The more plausible working case is a single new node between Norwich Main and Yaxley. This is speculative, but for the reasons set out above it is considered highly credible and sufficiently important to be tested expressly in the Examination.
- 3.4.2** On present evidence, Great Moulton is the leading candidate for that single node because the East Pye DCO expressly promotes the land and infrastructure for the new NGET 400 kV substation there. For the purposes of this report, references in connection material to “Long Stratton 400 kV”, “North Anglia Connection Node A” or an equivalent South Norfolk transmission connection are therefore treated as potentially referring to the same eventual physical transmission facility at Great Moulton, subject to confirmation by NGET/NESO.
- 3.4.3** This assumption is important but must remain explicit and testable. The ExA should establish whether NGET considers a second new 400 kV transmission substation between Norwich Main and Yaxley to be technically or operationally credible if Great Moulton proceeds, and whether “Long Stratton” is intended to be the transmission-grid designation for the Great Moulton (Long Stratton) substation.
- 3.5 Working Assumption: Confirmed and Spatially Uncertain Projects potentially contingent on a new Great Moulton (Long Stratton) 400kV grid connection**
- 3.5.1** The projects considered in the core analysis below are drawn from the NESO Transmission Entry Capacity (TEC) Register dated 18 August 2026, together with publicly identifiable schemes whose connection appears directly relevant to the proposed Great Moulton (Long Stratton) substation. The TEC Register records projects holding transmission connection contracts and includes

capacity, connection site, expected connection date, project status, technology and, where populated, Gate status.

- 3.5.2** The projects set out overleaf should not be treated as though they all have the same degree of locational certainty. The present public evidence supports the provisional classification below. “Confirmed/defined” means only that the development land can be identified publicly with reasonable confidence; it does not mean that a project is consented, funded, Gate 2 confirmed or certain to proceed. Four further entries which, on the face of their apparent geography, are less likely to connect to a new 400 kV Great Moulton (Long Stratton) substation are excluded from the core table and considered separately in Appendix 3.1. The Maltings/Station Road solar scheme is also deliberately not included in Table 3.1: it is a consented, locally connected/private-wire solar project rather than a transmission-scale TEC project. It is considered separately below because its physical overlap with East Pye remains relevant to layout and cumulative infrastructure context.
- 3.5.3** There is an additional complication in reading the project cohort from the NESO Transmission Entry Capacity (TEC) Register. The Register is principally a record of transmission connection contracts and standardised connection information; it is not a planning register and does not purport to reproduce the full development geography behind each entry. A project name may reflect a company, a working title or an electrical connection destination rather than the precise location of the generating or storage site.
- 3.5.4** Equally, a stated connection site such as Long Stratton 400 kV or North Anglia Connection Node A may identify where electricity is intended to enter the transmission system without showing where the solar arrays, batteries, private substations or cable corridors would actually be located. The same underlying development may therefore appear differently in planning and grid material, while two genuinely separate schemes may also carry superficially similar locality or capacity descriptions.
- 3.5.5** Gate status adds a further layer of uncertainty. A Gate 1 project may have a meaningful connection position while its land assembly, planning boundary or final connection route remains unsettled; conversely, NESO or NGET may hold materially more locational information than appears in the public Register, particularly where readiness evidence, land rights or an Original Red Line Boundary has been supplied.
- 3.5.6** The absence of a mapped project boundary from the TEC Register should therefore not be treated either as proof that a project is embryonic or as evidence that its location is being concealed. It is better understood as a public-information limitation which the Examination can test. Appendix 3 explains these register and Connections Reform issues in greater detail. They are important to the classification in Table 3.1 because the ExA needs to establish, project by project, whether apparently different entries are in fact the same scheme, whether apparently similar entries are separate schemes, and how much spatial definition already exists behind the published connection description.

Table 3.1 Projects with the potential to connect to a new 400 kV Great Moulton (Long Stratton) substation (if constructed) as at October 1, 2026

Project (promoter)	Current public/TEC position	Status in this report	Examination significance
East Pye Solar / Long Stratton PV & BESS Station (East Pye Solar Ltd)	Defined DCO development land; the TEC Register shows 500 MW at Long Stratton 400 kV.	CONFIRMED/DEFINED	The proposed Great Moulton (Long Stratton) substation forms part of the DCO connection strategy.
Field Long Stratton BESS (Field Long Stratton Ltd)	Public planning site north of Great Moulton; TEC entry of 400 MW at North Anglia Connection Node A 400 kV, Gate 1.	CONFIRMED/DEFINED	Directly relevant spatially and electrically; the precise connection route and dependency should be confirmed.
Tasway Energy Park (Aukera/ Tasway Energy Park Ltd)	Publicly identified development area; the promoter also appears against a TEC entry named Norwich Main BESS, considered separately in Appendix A.	CONFIRMED/DEFINED	The scheme is geographically relevant, but the identity and intended connection of the TEC entry require verification.
Wacton Road Farm (Qair Renewables UK Ltd)	TEC entry of 240 MW at North Anglia Connection Node A 132 kV, Gate 1; a local planning-site association requires confirmation.	PARTLY CONFIRMED	Potentially close to the proposed substation, but the exact project identity and connection arrangements should not be assumed.
Gissing BESS & PV (RPC / Elmya – RPC Elmya Carnation Gissing Ltd)	Former 900 MW TEC entry at North Anglia Connection Node A 400 kV; register-change evidence indicates removal on 25 August 2026. Promoter/project company remains active; future connection status and development geography uncertain.	FORMER TEC PROJECT / SPATIALLY UNCERTAIN	The ExA should establish whether the former project has been abandoned, superseded or reformulated; what NESO still knows about its land/readiness position; and whether RPC/Elmya retains a Great Moulton-related connection interest.
Noventum – Long Stratton (Noventum Power Solar 8 Ltd)	TEC entry of 460 MW solar/BESS at North Anglia Connection Node A 400 kV, Gate 1; no sufficiently precise public development boundary identified.	SPATIALLY UNCERTAIN	A large project whose land position and cable route could be material to cumulative assessment.
Long Stratton 400 (Enso Green Holdings X Ltd)	TEC entry of 400 MW solar/BESS at North Anglia Connection Node A 400 kV, Gate 1; no sufficiently precise public development boundary identified.	SPATIALLY UNCERTAIN	Another large project where the ExA should establish whether the connection assumes the proposed Great Moulton (Long Stratton) substation.

Field Long Stratton

- 3.5.7** Field Long Stratton is materially more mature than the spatially uncertain projects in Table 3.1. A full planning application (South Norfolk ref. 2025/1689) was submitted in June 2025 for a 400 MW BESS on a publicly defined site north of Carr Lane/Market Lane, Great Moulton. Following consultation and consultee responses, Field submitted revised designs and reporting in December 2025¹. The application is therefore not simply at land-search or grid-enquiry stage: the site, principal access arrangements and environmental case are already in the public planning system.
- 3.5.8** Field itself has a well-established BESS development, construction and operating record. Its current published portfolio identifies operational projects at Oldham, Newport and Gerrards Cross and projects in construction including Hartmoor, Whitebirk and Auchteraw. In July 2026 Field reported 490 MW/1.5 GWh in operation or construction and financial close on a further 1 GWh at Keith and Hartmoor². This is relevant because Field Long Stratton is being promoted by an organisation with demonstrable capability to take grid-scale storage projects beyond planning into financing, construction and operation, rather than by an otherwise untested single-project promoter.
- 3.5.9** The financial backing Field have is also significant. It was able to announce a £200 million investment from DIF Capital Partners in 2023, following an earlier £77 million funding package in 2022 comprising equity led by Plural and an asset-backed debt facility led by Triple Point³. By July 2026 Field stated that, including further CVC DIF investment and project financings, more than £500 million of debt and equity had been raised and invested into European flexible infrastructure. This does not guarantee that Long Stratton will be funded, but it substantially reduces the weight that can be placed on any suggestion that the proposal is merely aspirational for want of an experienced or capital-backed promoter.
- 3.5.10** Its grid position remains less mature than its planning position. Table 3.1 records the project as Gate 1 at North Anglia Connection Node A 400 kV, and the present public evidence does not establish a firm Gate 2 connection. That qualification is important. However, Gate 1 should not be confused with inactivity: Field has continued to progress planning, has obtained an electricity generation licence position for the project company, and Field Long Stratton was accepted into Ofgem's LDES eligibility process as a 400 MW Track 2 project⁴. The reasonable Examination question is therefore not whether the scheme is presently Gate 2, but whether confirmation of the Great Moulton connection and the continuing Connections Reform process could enable a presently advanced planning project to move rapidly into a firmer connection position^{5, 6}.
- 3.5.11** Planning timing reinforces that point. I have been informally advised by South Norfolk Council that application 2025/1689 is expected to be determined during the course of the East Pye Examination. That information should be treated as an informal indication rather than a binding committee timetable, but it means the Examination may be able to obtain a materially clearer planning position on Field Long Stratton before it closes. The ExA should therefore require the Applicant to keep the cumulative schedule updated and, if a decision is issued, address immediately what that decision means for the foreseeability, connection dependency and cumulative implications of Field Long Stratton.

Tasway Energy Park

- 3.5.12** Tasway Energy Park merits a specific qualification. On the presently available public evidence, the project is effectively parked rather than abandoned. Tasway has received a Gate 1 offer, and the promoter has stated that the planning submission programme will be delayed until there is better visibility of a grid connection point. Its earlier consultation material expressly contemplated a southern grid-connection option associated with the East Pye substation proposals.
- 3.5.13** It is therefore a credible, but necessarily provisional, inference that Tasway could seek to advance towards Gate 2 and a firm connection position if the proposed Great Moulton (Long Stratton) grid connection is confirmed and sufficient capacity becomes available. That should not be stated as an automatic consequence: Gate 2 progression would remain subject to the applicable readiness, strategic alignment and capacity requirements. The important Examination point is that a presently parked project may become materially more advanced if the network uncertainty which is currently holding it back is removed.

Wacton Road Farm

- 3.5.14** The Wacton Road Farm entry also requires clarification. South Norfolk planning application 2025/1152, for land north of Hill Farm, Wacton Road, Forncett St Peter, concerns a 120 MW/240 MWh BESS and was approved with conditions on 25 March 2026. The similarity of the location, the Wacton Road description and the 240 figure makes it credible that this consented scheme and the 240 MW Wacton Road Farm TEC entry are connected or may represent the same underlying project.
- 3.5.15** That identification cannot safely be assumed, however: the planning material and TEC entry are not expressed in identical terms, and the public record does not presently exclude the possibility that there are two separate BESS proposals in the Wacton/Forncett area. The ExA should therefore establish whether the consented Forncett BESS and the Wacton Road Farm TEC project are the same scheme; and, if they are not, identify the second project, its location, status, capacity and intended connection.
- 3.5.16** The distinction is potentially material to the cumulative assessment because two separate BESS projects close to the proposed Great Moulton transmission node would present a different development picture from a single project appearing under different planning and grid-connection descriptions.

RPC/Elmya – Gissing BESS & PV

- 3.5.17** The former 900 MW “Elmya Gissing BESS & PV” project requires particular caution. Earlier NESO TEC material identified the project at North Anglia Connection Node A 400 kV. Available register-change evidence indicates that the entry left the TEC Register on 25 August 2026. It should therefore no longer be described as a current contracted TEC project. The available evidence points more strongly to removal of that particular listed connection project than to a simple renaming, although the precise contractual reason is not established.

3.5.18 That change does not establish that all associated development activity has ceased. RPC Elmya Carnation Gissing Limited remains an active project company and has been associated with the emerging Dodd's Wood BESS proposal near Rushall. Removal from the TEC Register is therefore evidence about the status of one contracted connection entry, not proof that the promoter has abandoned all land, development work or future connection interest in the wider area.

3.5.19 This distinction is directly relevant to the purpose of Objection 3. A current TEC Register is a snapshot of contracted transmission positions, not a complete planning register of schemes being assembled, reformulated or held pending greater connection certainty. It remains possible that Dodd's Wood is wholly separate from the former Gissing proposition, that "Gissing" was a loose portfolio or connection label, or that earlier work may re-emerge in another form. None of those possibilities is established. The ExA should ask NESO and the promoter to confirm whether the former Gissing project has been permanently abandoned, superseded or reconfigured, and whether any related land or connection proposition remains relevant to Great Moulton.

Noventum

3.5.20 The Noventum entry should also be treated as a commercially credible development proposition rather than as an unexplained project-company name. Noventum Power Solar 8 Ltd is an active UK project company incorporated in 2023, while its wider developer, Noventum Power Limited, describes itself as a renewable-energy IPP with integrated development capability and publishes a substantial UK portfolio of solar, BESS and co-located solar/BESS projects. Its own published project material identifies Long Stratton as a Noventum project at Initial Surveys stage, with a 460 MW transmission connection and land under Option for Lease close to the point of connection.

3.5.21 The corporate backing is significant. Companies House records O.Y. Nofar Energy Limited as the body with significant control of Noventum Power Limited, with ownership of at least 75% of the shares and voting rights and the right to appoint or remove directors⁷. Nofar's own UK material identifies Noventum as one of its two UK subsidiaries and states that Noventum has approximately 567 MW under development. Nofar is therefore not simply a passive name behind the SPV: the public corporate record places Noventum within a larger international renewable-energy group with access to group capital and development resources⁸.

3.5.22 Noventum's UK track record is predominantly one of development and consenting rather than a demonstrated fleet of completed operating assets under the Noventum name. Its published projects include consented schemes such as Barnacre and Twyford and submitted projects such as Arleston. Nofar's 2026 reporting also records that Noventum secured three UK AR7 Contracts for Difference for solar projects with a combined expected capacity of about 63 MW. The correct conclusion is therefore measured: the Long Stratton project remains spatially uncertain and Gate 1, but the promoter has identifiable corporate backing and an active UK development pipeline, so the absence of a public planning boundary should not be treated as evidence that the proposition lacks substance.

Long Stratton 400 and Enso

3.5.23 Long Stratton 400 is held through Enso Green Holdings X Ltd, an active project company within the Enso corporate structure. The immediate SPV should not be judged solely by its own filed

balance sheet or lack of a public planning application. Enso Energy has a substantial UK development record and works in long-term partnership with Cero Generation; by January 2026 Enso stated that the partnership had achieved 28 successful planning applications with combined capacity exceeding 4.2 GW⁹

- 3.5.24** The wider funding and delivery platform is also material. Cero states that it is a Macquarie Asset Management portfolio company, with end-to-end development, construction and operating capability. Enso/Cero projects have progressed beyond consent: the Bumble Bee co-located solar/BESS project reached financial close in February 2026 with financing from ING, NORD/LB, Rabobank and Santander UK, while Cero had announced a further approximately £200 million UK portfolio financing package in 2025. This evidence demonstrates access to institutional-scale development and project finance within the partnership¹⁰.
- 3.5.25** There is nevertheless an evidential step which the Examination should not skip. Public material does not yet demonstrate that the specific Long Stratton 400 project vehicle has a fixed development site, a planning programme, committed project finance or a Gate 2 offer; nor should it simply be assumed that every Enso project vehicle is funded through the Cero partnership on identical terms. The significance is narrower but still important: the project is associated with a promoter group possessing a substantial UK consenting record and a financially credible delivery partner. The ExA should therefore establish the project-specific land, funding, Gate and planning position rather than discounting it because public spatial information is presently sparse¹¹.

The Maltings/Station Road Solar

- 3.5.26** The Maltings is materially different from the transmission-scale projects in Table 3.1. South Norfolk planning permission 2024/3817 was granted with conditions on 30 June 2025 for a solar photovoltaic farm on land north of Station Road, Tivetshall St Margaret. The planning material describes a scheme of approximately 36.9 hectares, expected to generate about 27.9 GWh per year, with a proposed private-wire connection to the Maltings factory together with a connection to the local electricity grid. It is therefore a known and consented local renewable energy project, not an unidentified future possibility¹².
- 3.5.27** For that reason it is deliberately not listed in Table 3.1. The table is intended to identify transmission-scale TEC/Node A/Long Stratton projects whose relationship with a new Great Moulton 400 kV node requires examination. The Maltings scheme is already defined through the TCPA planning system and its principal electricity relationship is private wire/local distribution rather than a separate transmission TEC entry. Its relevance is nevertheless direct: East Pye's own cumulative material records¹³ partial overlap with Sub-Site 1C, and the existence of the consented scheme may constrain or displace East Pye electrical infrastructure and contribute to a less optimal layout. It should therefore remain in the narrative cumulative context without being counted as another transmission-project entry in the Great Moulton hub schedule.

3.6 The Search for Possible Locations of Publicly Undefined ("Footloose") Renewable-Energy Projects

- 3.6.1** Table 3.1 identifies three especially significant spatially uncertain propositions - the former RPC/Elmya Gissing BESS & PV connection, Noventum - Long Stratton and Long Stratton 400. The public record has at different times identified very substantial generation or storage capacities

and a Long Stratton/Node A transmission relationship but has not disclosed sufficiently precise development boundaries to show where the principal generating, storage or associated electrical land lies. In that limited public sense they remain spatially uncertain.

- 3.6.2** The evidential problem is therefore straightforward. Connection information points to large projects or promoter interests whose public geography is incomplete, while NESO may hold materially more information than is displayed on the TEC Register. The Examination should not attempt to invent locations. It should establish what NESO actually knows: whether a site, Original Red Line Boundary, land-rights plan, broad search area or other readiness evidence has been supplied, and whether the connection proposition remains live after Connections Reform.
- 3.6.3** There are several innocent explanations for the public information gap. A project name may be only a working, company or electrical label; a site may still be evolving; commercially sensitive land negotiations may not be public; or a project may have been removed, delayed or reformulated. The former Gissing entry is a useful warning against treating a historic TEC entry as a fixed and current planning project.
- 3.6.4** There is, however, a further possibility which the Examination should test rather than assume away. A major promoter may rationally defer public promotion, detailed planning work or a fresh connection application while the East Pye DCO and the Great Moulton transmission node remain uncertain. If the node is subsequently consented, the promoter could then advance a project against an established grid baseline. That would be a commercial sequencing strategy; it is not, without evidence, proof of concealment or improper conduct.
- 3.6.5** The RPC/Elmyra evidence makes that possibility worthy of enquiry but not of conclusion. The disappearance of the 900 MW Gissing TEC entry while the project company remains active and appears in connection with Dodd's Wood creates an evidential ambiguity. It is capable of being explained by withdrawal, reformulation, portfolio management or a genuinely separate project. It is also consistent with a promoter retaining optionality while waiting to see whether a strategic connection opportunity becomes firmer. The present evidence does not permit the objection to choose between those explanations.

Table 3.2 - Reasons why the search for the spatially uncertain Table 3.1 projects may ultimately prove false or materially different

Possible explanation	How it could alter or defeat the spatial search	Examination implication
Project or locality name is misleading	A TEC/project name may be a company, electrical connection, portfolio or legacy label rather than the physical site. "Gissing" or "Long Stratton" may therefore point only loosely towards the development land.	The ExA should not infer a site from the name; it should seek the broad development geography or Original Red Line Boundary held by the relevant network party/promoter.

Possible explanation	How it could alter or defeat the spatial search	Examination implication
Two entries are the same, related or evolving project	A scheme may have changed promoter, SPV, technology, capacity or working title, creating an apparent additional project where there is only one underlying proposition.	The ExA should establish project identity and remove double counting before assessing cumulative effects.
The project is not technically feasible in its present form	Network design, fault level, system stability, cable routing, land take or other engineering constraints may prevent the stated project or require material redesign.	The ExA should establish whether the connection proposition remains technically live and on what assumptions.
Insufficient transmission capacity is actually available	The aggregate connection capacity assumed in Objection 2 may prove greater than the capacity which can in practice be accommodated at Great Moulton after East Pye and network requirements are taken into account.	The ExA should obtain an authoritative capacity position from NESO/NGET rather than infer spare capacity from project entries alone.
The project is screened out through Connections Reform / NESO processes	A Gate 1 or otherwise immature project may fail readiness, strategic alignment or other reform criteria and never receive a firm Gate 2 position.	The ExA should establish the current reform status and whether the project remains in the live connection queue.
Land rights or a viable site cannot be secured	A promoter may have a connection proposition but fail to assemble sufficient land, easements or a practicable cable corridor.	The ExA should distinguish a purely electrical position from evidence of land readiness.
Funding or commercial support is not secured	The promoter may be unable to fund development/construction or may conclude that the project no longer meets investment criteria.	Promoter capability and project-specific financing maturity should be treated separately.
The promoter has other priorities or the project is deferred	Capital, staff and development effort may be redirected to projects elsewhere, leaving a nominal connection entry dormant or strategically low priority.	The ExA should establish whether the project is actively progressing, paused or effectively parked.
Planning or environmental constraints prove overriding	Landscape, ecology, heritage, agricultural land, highways, residential amenity or other constraints may make otherwise electrically convenient land unacceptable.	A plausible search area is not equivalent to a developable or consentable site.
The project connects elsewhere or changes configuration	A project may move to another node, connect at distribution level, reduce capacity, change from solar to BESS (or vice versa), or adopt a different hybrid configuration.	The cumulative scenario should be updated to reflect the connection and technology actually being pursued.

- 3.6.6** A related planning risk is sequential project promotion. If substantial schemes known to NESO or promoters remain outside the public planning picture during the East Pye Examination, but are brought forward only after the DCO has established the Great Moulton node, each later proposal may be presented against the new substation as part of the existing baseline. In practical terms that could produce a form of post-consent salami slicing: not because separate later projects are automatically unlawful, but because the cumulative consequences of creating the enabling node may never be examined at the point when the strategic opportunity is created.
- 3.6.7** That risk must be expressed cautiously. There is no present evidence establishing a coordinated intention by RPC/Elmyra, Noventum or any other promoter to withhold a project from scrutiny. The point is that the pattern is commercially plausible and the necessary facts are capable of being tested. NESO should be asked whether it holds connection applications, Gate-readiness evidence, land information, withdrawn or superseded offers, or other records for these promoters or projects which are not apparent from the current public register.
- 3.6.8** The correct response is therefore evidence-led. The ExA should determine for each spatially uncertain proposition whether it remains live, has been withdrawn or superseded, has a privately defined site or search area, and depends upon the proposed Great Moulton connection. If the answer is that the projects have genuinely fallen away, the hub case narrows. If NESO holds evidence of materially developed projects not visible on the current TEC Register, that evidence should inform the cumulative and reasonably foreseeable development assessment before the DCO is decided.

3.7 Likely Connection Catchment

- 3.7.1** For spatial analysis, the countryside around Great Moulton is better treated as a connection catchment than as a single energy park. Different technologies are likely to have different practical connection distances.
- 3.7.2** For a large stand-alone BESS, the primary search area is likely to be comparatively tight: approximately 0-5 km from the transmission node, with the strongest locational pull generally closer to the node. Additional cable length introduces cost, electrical losses, land-rights requirements and construction impacts. On that basis, the Great Moulton-Wacton-Tivetshall-southern Long Stratton area is particularly significant for storage and related electrical infrastructure.
- 3.7.3** Solar projects may plausibly be located farther away because substantial land assemblies can be connected by underground cable networks. A broad 0-10 km radius is a credible indicative catchment for medium-scale utility solar, while very large solar projects may remain technically plausible out to approximately 0-15 km where the value of a 400 kV connection justifies the additional cable infrastructure.
- 3.7.4** These distances should not be treated as fixed thresholds. They are indicative planning search bands rather than engineering limits. Taken together, they define a potentially extensive renewable-energy development catchment centred on the Great Moulton (Long Stratton) transmission connection point.

Table 3.3 - Indicative connection catchments around the Great Moulton (Long Stratton) 400 kV grid connection

Technology / project type	Indicative connection distance	Indicative settlements / areas within or at the edge of the band
BESS	0 - 5 km	Great Moulton, Wacton, Aslacton, Forncett St Peter, Long Stratton (particularly its southern side), Tivetshall St Margaret and Tivetshall St Mary; Pulham Market lies around the outer edge of this broad band.
Medium solar	0 - 10 km	The 0-5 km settlements plus Pulham Market, Pulham St Mary, Tasburgh, Hempnall and Bunwell, together with the wider Forncett-Tivetshall-Pulham countryside.
Large solar	0 - 15 km	All of the above, with the broad catchment extending towards settlements such as Brooke and Harleston and across a substantially wider part of rural South Norfolk.

Note: The settlement examples are illustrative only. They use broad radial bands around Great Moulton and are not a substitute for GIS measurement from the final substation connection point; settlement edges and individual development sites may fall inside or outside a band even where the settlement centre does not.

3.8 Spatial basis and limits of the locational search

3.8.1 The locational exercise in this objection requires a broad spatial framework, but it is not intended to carry out the landscape and visual impact assessment itself. Natural England places the proposed node within the South Norfolk and High Suffolk Claylands, and the South Norfolk Landscape Character Assessment identifies related lowland agricultural character areas across much of the wider hinterland. At this strategic scale there is no single sharp landscape-geographical boundary which, by itself, confines the search for the spatially uncertain projects to one sector.

3.8.2 That observation is used here only to test where a project might plausibly be located. It does not mean that all land is equally suitable, equally available or equally capable of accommodating development without harm. Local settlement, heritage, ecology, flood risk, public rights of way, aviation, highway, landholding and landscape constraints may be decisive at site level.

3.8.3 Drawing No. 3.1 and the six-quadrant framework provide a neutral geographical device for describing the possible geography of the hub. The cumulative landscape and visual consequences which could arise if East Pye and other credible hub projects were distributed across this wider catchment are considered in Objection 4.

3.9 Indicative Geographical Quadrants

3.9.1 For the purposes of the spatial search only, Drawing No. 3.1 divides the countryside within the 15 km Great Moulton Substation hinterland into six equal angular quadrants radiating from the proposed Great Moulton (Long Stratton) substation. The subdivision is an arbitrary analytical device. It does not follow parish, ownership, landscape-character, highway, electrical-network or

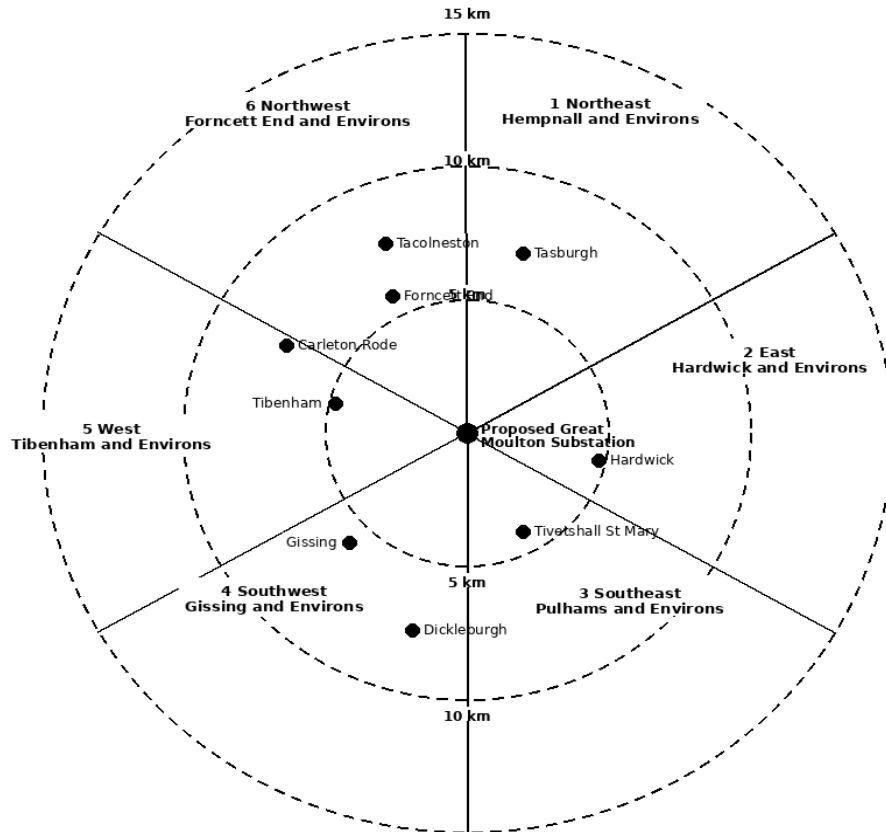
planning boundaries, and it should not be read as implying that land within a quadrant is homogeneous, available or suitable for renewable-energy development.

- 3.9.2** The six quadrants provide a consistent geographical shorthand for discussing where known schemes lie and where the three spatially uncertain projects identified in Table 3.1 might, or might not, be capable of being accommodated. Their purpose is to prevent the locational search from drifting between differently named areas. The quadrant labels are therefore descriptive only and carry no presumption that a project exists in any particular sector.
- 3.9.3** Drawing No. 3.1 should be read in that limited way. It is a simple diagram rather than a survey plan: the 5 km, 10 km and 15 km rings are radial guides from the proposed substation, settlements and known schemes are shown to aid orientation.
- 3.9.4** The quadrant framework defines the spatial structure of the hub enquiry. Objection 4 applies that framework to the project-by-project and quadrant-by-quadrant implications, including the relevance of linear infrastructure, Tibenham Airfield, field pattern, cable geography and cumulative landscape effects.

Drawing No 3.1 Great Moulton (Long Stratton) Substation

Quadrants to analyse for their Potential for a location of additional renewable energy projects

Simple diagram - not to scale



All distances measured radially from the proposed Great Moulton (Long Stratton) substation.

No.	Quadrant	Description
1	Northeast	Hempnall and Environs
2	East	Hardwick and Environs
3	Southeast	Pulhams and Environs
4	Southwest	Gissing and Environs
5	West	Tibenham and Environs
6	Northwest	Forncett and Environs

3.10 Reasoned Conclusions

- 3.10.1** The evidence assembled in this objection identifies a credible cohort of projects associated with Long Stratton 400 kV, North Anglia Connection Node A or the immediate Great Moulton area. The degree of certainty differs materially between projects, but the combination of defined schemes, Gate 1 projects, a former very large TEC entry and spatially uncertain but commercially credible promoters is sufficient to require an authoritative project and connection account from NESO and NGET during the Examination.
- 3.10.2** The principal purpose of this objection is therefore evidential rather than predictive. It does not assert that every project in Table 3.1 will proceed, nor that any spatially uncertain project occupies a particular quadrant. It asks the Examination to establish which projects remain live, where they are sufficiently defined, what land-readiness information exists, and whether their connection proposition assumes or would be materially assisted by the proposed Great Moulton (Long Stratton) 400 kV node.
- 3.10.3** Drawing No. 3.1 and the quadrant framework provide a neutral geographical structure for that enquiry. Objection 4 considers the detailed spatial testing of the projects against the six quadrants and the associated cumulative landscape and visual consequences.
- 3.10.4** The Examination should therefore determine, on the best available evidence, whether the totality of the connection and project information discloses a sufficiently mature concentration of renewable-energy, storage and electrical infrastructure proposals for a Great Moulton Energy Hub to be treated as a reasonably foreseeable scenario. If that threshold is met, the corresponding spatial and cumulative effects should then be examined through Objection 4 and the wider industrialisation and corridor issues addressed in Objections 5 and 6.

3.11 Status of NGET/NESO Evidence

- 3.11.1** My 10 August 2026 Environmental Information Regulations request to NGET remains relevant to this objection. Although Objection 2 uses that request principally to investigate NGET's design and enabling role, the request also seeks clarification of projects and connection descriptions associated with Long Stratton, North Anglia Connection Node A and the proposed Great Moulton substation. The response should be placed before the Examining Authority when received.
- 3.11.2** This objection should also be updated against the latest NESO TEC Register and Connections Reform position during the Examination. The purpose is not to require certainty about projects which are genuinely immature, but to ensure that decisions about cumulative effects and the hub scenario are taken on the best available evidence rather than on public-information gaps which NESO, NGET or promoters may be able to resolve. On 21 September 2026, I also submitted an Environmental Information Regulations request to NESO seeking recorded information about the physical location of the spatially uncertain projects considered in this objection; the full text of that request is reproduced at Appendix 3.3.

Appendix 3.1: Projects outside the core Great Moulton assessment - geographical caution and safety check

- A3.1.1** The entries below are not relied upon in the core Great Moulton spatial analysis. For four projects on the current NESO TEC register which appear to have something of a South Norfolk nexus and are listed in Table A3.1 below - GF Norwich BESS, Intwood Farm BESS, Wymondham Road Farm and Swainsthorpe - the present geography, so far as it can be understood from the public material and project naming, appears on the face of it to work against a connection to a new 400 kV Great Moulton (Long Stratton) substation if those projects are pursued.
- A3.1.2** That is a reason for caution, not a basis for final exclusion. Connection-site descriptions do not necessarily identify the generating or storage site, project names can be geographically imprecise, and future network design or routing may differ from the apparent position. A Great Moulton connection therefore cannot entirely be ruled out without confirmation from NESO and/or NGET. The remaining Appendix entries are retained for the same limited purpose: to define a proportionate Examination safety check. Unless a Great Moulton connection, dependency or redirection is confirmed, none of these projects should be treated as part of the core cumulative case.

Table A3.1: Projects outside the core Great Moulton assessment: residual uncertainty and safety check

Project/entry	Reason for exclusion from core analysis	Residual uncertainty	Safety check sought
GF Norwich BESS (GF Norwich Energy Ltd)	The project name points towards Norwich rather than Great Moulton, and the presently apparent geography does not naturally suggest a connection to the proposed Great Moulton (Long Stratton) 400 kV substation.	The TEC connection description refers to North Anglia Connection Node A 400 kV. The project name does not establish the generating-site location, and the intended physical Node A facility is not finally demonstrated by the public material.	Confirm whether the project would connect to, depend upon, or be capable of being redirected to the proposed Great Moulton (Long Stratton) 400 kV substation. If not, exclude it from the core Great Moulton cumulative analysis.
Intwood Farm BESS (Intwood BESS Ltd)	The named locality appears geographically removed from Great Moulton and, on the face of it, a Great Moulton connection would be counter-intuitive if the project proceeds.	The entry nevertheless refers to North Anglia Connection Node A 132 kV. It remains necessary to establish whether Node A could denote infrastructure ultimately associated with the Great Moulton transmission node.	Confirm whether the project would connect to, depend upon, or be capable of being redirected to the proposed Great Moulton (Long Stratton) 400 kV substation. If not, exclude it from the core Great Moulton cumulative analysis.
Wymondham Road Farm (Qair Renewables UK Ltd)	The apparent geography associated with Wymondham Road does not, on its face, favour a connection to Great Moulton, particularly given the 132 kV connection description.	The precise development site, which Wymondham Road is intended, and the physical meaning of North Anglia Connection Node A are not sufficiently clear publicly to exclude Great Moulton conclusively.	Confirm whether the project would connect to, depend upon, or be capable of being redirected to the proposed Great Moulton (Long Stratton) 400 kV substation. If not, exclude it from the core Great Moulton cumulative analysis.
Swainsthorpe (Lightsource Renewable UK Development Ltd)	The named Swainsthorpe locality lies materially north of the immediate Great Moulton catchment, and the geography therefore appears to work against a Great Moulton connection.	The entry is nevertheless a substantial 300 MW solar/BESS project at North Anglia Connection Node A 400 kV. The Node A designation means the intended physical connection point should be confirmed rather than inferred solely from the project name.	Confirm whether the project would connect to, depend upon, or be capable of being redirected to the proposed Great Moulton (Long Stratton) 400 kV substation. If not, exclude it from the core Great Moulton cumulative analysis.

Project/entry	Reason for exclusion from core analysis	Residual uncertainty	Safety check sought
Norwich Main	The name points towards Norwich Main rather than establishing a physical relationship with Great Moulton.	A connection name does not necessarily identify the generating site or final network design.	Confirm that the entry will not connect at, depend upon or be redirected to Great Moulton.
Old Stoke Road BESS	The road-name location and 132 kV connection description appear unlikely to place the project within the Great Moulton 400 kV catchment.	The intended physical Node A facility is not self-evident from the public description alone.	Confirm the physical connection point and exclude Great Moulton if appropriate.
Land at Wood Farm	The locational description appears insufficiently connected to the Great Moulton area to justify inclusion in the core cohort.	Public naming alone does not conclusively establish the grid route.	Confirm that no Great Moulton connection or dependency is contemplated.
Cawston Road	The named locality appears remote from the proposed Great Moulton substation and more likely to relate to another part of the North Anglia network.	Future network reconfiguration cannot be ruled out solely from a project name.	Confirm that the project is not intended to use the Great Moulton substation.

Appendix 3.2: TEC Register uncertainty: purpose and scope

- A3.2.1** This Appendix supports the main analysis by explaining why a project can have a genuine transmission-connection position even where its generating or storage site is not yet precisely identifiable from the public NESO TEC Register. It also explains why the absence of a public red-line boundary should not, without more, be equated either with project immaturity or deliberate concealment.
- A3.2.2** The central issue is the difference between information required to administer a grid connection and assess readiness, information held by NESO or a Transmission Owner for those purposes, and the smaller standardised dataset chosen for publication.
- A3.2.3** Those categories overlap, but they are not the same. The resulting public-information gap is therefore an evidential issue for the Examination to test, not in itself evidence of impropriety.

What the TEC Register is — and is not

- A3.2.4** NESO describes the TEC Register as a list of projects holding contracts for Transmission Entry Capacity, including existing and future projects. Its purpose is therefore to show the contracted transmission position, rather than to reproduce the documentation that underpins each project's land, planning or commercial arrangements.
- A3.2.5** The current public dataset includes Project Name, Customer Name, Connection Site, Stage, connected and future MW, contracted effective date, Project Status, Agreement Type, Host TO, Plant Type, Project ID, Project Number and Gate. There is no published field for a project red-line boundary, landowner details, option agreements, lease plans, coordinates of the generating site or cable-route geometry.
- A3.2.6** This matters, because the field "Connection Site" is defined by NESO as the "Name of Generation Connection Site". A label such as "Long Stratton 400 kV" or "North Anglia Connection Node A 400 kV" can therefore identify where the project is intended to connect electrically without identifying where the renewable-energy development itself will be constructed.
- A3.2.7** The public register should consequently be read as a connection register. It can be powerful evidence that a named project and capacity are part of the contracted transmission pipeline, but it is not, by itself, a reliable cadastral or planning map of where the associated solar arrays, BESS compounds or private substations will sit.

Why a promoter may not yet have supplied a fully fixed project location

- A3.2.8** There are several ordinary development reasons why a promoter may have a meaningful grid project before its final planning geography is fixed. The relative importance of these reasons will differ project by project.

Table A3.2 - Reasons why precise public project geography may not yet exist

Reason	Why precise public geography may not yet exist
Project sequencing	Grid capacity is scarce and connection lead-times are long. Promoters may therefore progress a connection strategy before every element of the planning site, land assembly and cable route has been finalised.
Electrical destination versus development site	For connection purposes the critical early information may be capacity, technology, export requirements and an electrical point of connection. The generating/storage site may be several kilometres from that electrical destination.
Land assembly still evolving	A promoter may be negotiating options or leases across several landholdings and may refine the eventual project boundary as agreements are secured or rejected.
Alternative layouts	Solar, BESS and associated substations can often be configured in more than one way within a wider search area. Early connection work may therefore precede a single fixed planning red line.
Cable-route uncertainty	The main energy site may be substantially known while the final cable corridor, intermediate substation land or access arrangements remain subject to survey and negotiation.
Planning route and timing	A project may not yet have entered the public planning system, particularly where environmental surveys, land negotiations and design development are still under way. Public planning disclosure and grid-contract milestones do not necessarily occur simultaneously.
Corporate/project naming	Connection contracts may be held by project companies or under working project names that do not correspond neatly to the later planning application name or nearest settlement.
Gate status	A Gate 1 or otherwise transitional project may have a less settled development position than a project that has demonstrated Gate 2 readiness. The TEC entry alone should not be used to infer the same locational maturity for every project.

A3.2.9 None of these explanations means that the project is merely fictional. Equally, none proves that it is mature. They explain why connection maturity and planning-site maturity can be different and why each project needs to be examined on its own evidence.

Why NESO may hold more locational information than it publishes

A3.2.10 Connections Reform strengthens the possibility that NESO may hold detailed evidence that does not appear in the TEC Register. NESO's Gate 2 evidence process requires customers seeking Gate 2 treatment to demonstrate readiness and strategic alignment. For the land-rights route, the published methodology and supporting guidance refer to an Original Red Line Boundary and evidence demonstrating the required land position.

A3.2.11 That Original Red Line Boundary is an evidential input used to test readiness. It is not a data field in the public TEC Register. The existence of a spatial document in NESO’s evidence system therefore does not imply that the same document - or even coordinates derived from it - will appear in the public register.

A3.2.12 NESO’s portal material also shows that there are different readiness routes and that the evidence interface changes depending on the route selected. It would therefore be unsafe to assume that every Gate 2 project must have supplied the same form of spatial material. The relevant question is what information was required and actually supplied for the particular project.

A3.2.13 The practical implication is that “not shown on the TEC Register” and “not known to NESO” are not equivalent propositions. NESO may hold a boundary, land-rights evidence, a planning reference or other spatial material even though the public-facing register continues to display only the standard connection fields.

Why NESO may not publish detailed project-location material

Table A3.3 - Reasons detailed project-location material may remain outside the TEC Register

Factor	Why detailed information may remain outside the TEC Register
Register design and purpose	A standard capacity register is intended to present comparable connection information across a very large national project pipeline. Detailed site polygons would be a different dataset with different governance, verification and maintenance requirements.
Commercial sensitivity	Before a planning application is public, precise land positions can reveal negotiations, option areas, competing land interests and development strategy. NESO can legitimately need such information for a regulatory/contractual purpose without automatically publishing it.
Third-party information	Land-rights evidence can contain information about landowners, option agreements, leases, agents and contractual terms that is not necessary for a public connection register.
Data quality and change control	Project boundaries can change. Publishing a geometry carries a risk of creating apparent certainty where the promoter’s planning design is still evolving. NESO already notes that some register corrections can take time under its data-governance processes.
Separation of functions	NESO administers the system and connections process; the planning system is the principal route by which detailed development boundaries, environmental assessments and consultation material become public.
Consent-based publication in some reform datasets	NESO states that its Existing Agreements Register contains projects that applied for Gate 2 where consent was given for inclusion. This illustrates that publication of some connection-reform information is itself governed by a defined publication process rather than by an assumption that all underlying evidence is automatically public.

A3.2.14 These are ordinary reasons for differential disclosure. They provide a much more plausible starting point than an allegation that NESO or promoters are attempting to obscure the true geography of projects.

Why the spatial uncertainty should not be characterised as obfuscation

A3.2.15 There is presently no evidential basis, from the mere absence of site boundaries on the TEC Register, to infer a deliberate attempt by promoters or NESO to obfuscate. Such an inference would confuse the limited purpose of the public register with the much broader body of information that may exist behind a connection application or Gate assessment.

A3.2.16 A more balanced formulation is that there is a transparency gap for planning and cumulative-impact purposes. That gap can be important without being improper. The public may be unable to map a project accurately even though the promoter and NESO have acted entirely consistently with the connection process.

A3.2.17 This distinction strengthens rather than weakens the case for Examination questions. The ExA does not need to allege concealment in order to ask whether more precise locational information exists and whether it is relevant to the reasonably foreseeable environmental consequences of the proposed Great Moulton transmission infrastructure.

A3.2.18 Where commercially sensitive detail exists, there are proportionate alternatives to complete public disclosure. For example, NESO, NGET or a promoter could confirm whether a site is geographically defined; identify the broad sector or parish; provide approximate distance and direction from the proposed grid node; confirm the approximate land take; or provide suitably redacted mapping sufficient for cumulative assessment.

Application to the Great Moulton / Long Stratton project cohort

A3.2.19 The main body of Objection 3 distinguishes between a core group of projects whose geography or connection description makes a Great Moulton (Long Stratton) relationship sufficiently plausible for direct examination, and a further group placed in A3.1 because their apparent geography presently works against such a connection. It nevertheless warns that public spatial uncertainty is not proof of project immaturity and that connection naming alone cannot finally determine the physical point of connection.

A3.2.20 That distinction is consistent with NESO's register architecture. A project can appear with a named capacity, promoter/customer, technology and transmission connection site while the actual development land remains invisible in the published fields. Conversely, a project name containing a settlement—such as "Gissing", "Long Stratton" or "Norwich Main"—should not automatically be treated as a reliable description of the generating or storage site.

A3.2.21 The most useful evidential task for the East Pye Examination is therefore to sort the projects into categories: (i) no site yet defined; (ii) broad search area or land position defined but still evolving; (iii) site geographically defined and known to NESO/NGET but not publicly mapped; and (iv) site already publicly defined through planning or DCO material.

A3.2.22 That categorisation would give the ExA a much firmer basis for deciding which projects are sufficiently foreseeable to carry weight in a cumulative assessment, and which remain too embryonic. It would also prevent the public TEC Register being asked to perform a planning function for which it was not designed.

Could there be viable projects beyond the public TEC Register?

A3.2.23 Yes. The present TEC cohort should not be treated as a definitive ceiling on the number of renewable-energy or storage projects that could have future viability in the Great Moulton/Long

Stratton area. A scheme can be commercially serious before it has reached the point at which it appears as a countersigned transmission agreement in the public TEC dataset. Under the enduring reformed process, new projects enter through application windows rather than through a continuously open first-come queue.

A3.2.24 Potentially relevant categories include: projects still at land-search, option or environmental-survey stage; projects waiting for a future Gate 1/Gate 2 application window; projects whose electrical route is initially through a DNO or large-embedded connection rather than a straightforward transmission TEC entry; projects progressing under a different corporate or project name; and projects for which a reform publication does not provide a complete public record of the underlying evidence. NESO states, for example, that its Existing Agreements Register identifies Gate 2 applicants where consent was given for inclusion.

A3.2.25 This does not justify assuming that unknown projects exist in any particular number or location. It does justify a narrower proposition: the presently identifiable project cohort is the presently identifiable evidence base, not proof that the development pipeline is exhausted. For cumulative-assessment purposes the ExA can distinguish between projects sufficiently advanced to be reasonably foreseeable and the wider, less certain possibility of later projects attracted by a new 400 kV connection opportunity.

A3.2.26 The point is especially relevant to BESS. NESO's published reform results indicate that future battery entry to the Gate 2 pipeline is constrained by the strategic capacity envelope unless specified protections apply, sufficient existing Gate 2 battery capacity leaves the pipeline, or future strategic plans increase the permitted capacity. That makes the future pipeline potentially more selective, but not necessarily empty.

Could promoters delay or sequence projects because other schemes appear more advanced?

A3.2.27 Potentially, yes - as a commercial and development-sequencing decision rather than as a formal NESO requirement. A promoter considering South Norfolk may take account of whether East Pye, Field Long Stratton or another scheme appears likely to establish the grid infrastructure, land corridor or network reinforcement on which a later project could depend. It could be rational to avoid incurring the full cost of land assembly, surveys and planning work until there is greater confidence that the relevant transmission node will proceed.

A3.2.28 East Pye DCO consent could therefore operate as a practical confidence threshold for some promoters. A promoter might wait for consent, for NGET commitment to the Great Moulton/Long Stratton substation, or for greater certainty over the final connection design before making its own project public or committing substantial development expenditure. That is a plausible commercial inference, not evidence that any identified promoter is actually following that strategy.

A3.2.29 There is, however, a countervailing incentive not to wait. Gate 2 is no longer simply a matter of joining a queue early: projects must satisfy readiness and strategic-alignment requirements, and Gate 2 provides a confirmed connection date, connection point and queue position. Projects that do not meet Gate 2 criteria remain Gate 1 and may seek progression in later windows. A promoter may therefore wish to secure land and readiness evidence early enough to compete effectively when the relevant window opens.

A3.2.30 The result is that the visible planning pipeline may lag behind the commercially active pipeline. Some promoters may advance openly; others may remain at option, survey or Gate 1 stage until the Great Moulton network position is clearer. The ExA should therefore avoid treating the

present absence of a planning application as conclusive evidence that no materially advanced project exists.

What Connections Reform may mean for the TEC Register - and the current timeline

- A3.2.31** Connections Reform replaces the former predominantly first-come, first-served queue with a gated and strategically aligned process. Gate 1 applies to projects that do not meet Gate 2 criteria and normally provides an indicative rather than confirmed position; Gate 2 is for projects meeting readiness and strategic-alignment requirements and can secure a confirmed date, connection point and queue position.
- A3.2.32** For the existing queue, the one-off Gate 2 to Whole Queue exercise is still being translated into revised offers. NESO's current published timetable states that Gate 2 Phase 1 transmission and large-embedded offers are being issued between mid-May and mid-September 2026, with Phase 2 transmission and large-embedded offers between early September 2026 and mid-January 2027. Distribution offers extend later, with Phase 1 running to mid-November 2026 and Phase 2 to mid-March 2027.
- A3.2.33** This means the TEC Register during the East Pye pre-examination/examination period should be treated as dynamic. NESO has added a Gate column, but states that it is populated when agreements have been countersigned; until countersignature it may remain blank. Reform can therefore alter whether a project is shown as Gate 1 or Gate 2, its connection date, its confirmed point of connection and its practical queue position, with some lag between an underlying reform decision and the public register entry.
- A3.2.34** For new projects, NESO's enduring model uses two connections application windows each year. This is important to the Great Moulton analysis because a project that is not visible today may become formally visible in a later window, while an existing entry may change materially as a reform offer is issued, accepted, rejected or allowed to lapse.
- A3.2.35** The ExA may therefore find it useful to request a dated NESO schedule for the South Norfolk cohort at one or more examination deadlines, showing for each project the then-current Gate classification, offer status, connection point, contracted date and whether any material reform decision remains outstanding. A static extract taken before the reform offer process has settled could otherwise give a misleading impression of certainty.

Commercial confidentiality: what if NESO says it cannot provide the information?

- A3.2.36** A claim of commercial confidentiality would not automatically be improper. Precise land options, contractual terms and development strategy can engage legitimate commercial interests. Under the Environmental Information Regulations 2004, regulation 12(5)(e) can protect confidential commercial or industrial information where the legal requirements are met, subject to the public-interest test and the EIR presumption in favour of disclosure.
- A3.2.37** But an EIR disclosure request and an NSIP Examination request are not the same process. Rule 17 of the Infrastructure Planning (Examination Procedure) Rules 2010 permits the ExA, at any time before the examination closes, to request further information from any person and require a written response within a specified period. Government examination guidance expressly describes Rules 8 and 17 as enabling the ExA to ask written questions and require additional information from anyone during the examination.
- A3.2.38** Accordingly, a blanket answer that "NESO holds relevant locational evidence but cannot answer any of these questions because it is commercially confidential" need not be the end of the matter. The ExA could ask NESO to identify precisely what category of information is withheld, why disclosure would cause a concrete commercial prejudice, whether the concern attaches to

the whole document or only parts of it, and whether the evidential proposition can be answered at a less sensitive level.

A3.2.39 Proportionate alternatives could include: confirmation that an Original Red Line Boundary exists without publishing it; parish or broad search-area identification; approximate distance and direction from Great Moulton; indicative hectares; confirmation whether qualifying land rights have been accepted; a redacted plan; or a project-by-project “yes/no/not yet determined” response on dependence upon the proposed 400 kV substation. Planning Inspectorate guidance recognises redaction as a means of protecting material that should not appear on the public record, while retaining an unredacted version for the ExA; it also makes clear that if redacted material is important and relevant, fairness may require a version capable of being published so that others can comment.

A3.2.40 The ExA should be cautious about relying materially on evidence that affected parties cannot know or test. There is no general commercial-confidentiality exception that converts the Planning Act examination into a closed evidence process. If the withheld detail is essential to a cumulative-impact conclusion, the ExA could seek the least-sensitive sufficient disclosure, ask the promoter/NGET for equivalent evidence, or record that the evidence base remains incomplete and take that uncertainty into account when deciding what weight can safely be placed on assurances that no additional foreseeable projects are likely.

A3.2.41 The strongest formulation is therefore not that NESO must publish every commercially sensitive land document. It is that commercial sensitivity should be addressed by necessity, proportionality and redaction rather than used as a blanket reason why the ExA cannot establish facts that may be material to cumulative effects and the reasonably foreseeable consequences of creating the Great Moulton transmission node.

Relationship to the Main Questions for Examination

A3.2.42 The questions arising from this supporting analysis are consolidated with the project-specific questions in the single set of Questions for Examination in the main body of Objection 3. They are not repeated here.

Conclusion

A3.2.43 The absence of precise project locations from the NESO TEC Register is not, without more, evidence of obfuscation. The better explanation is structural: the register records connection contracts and standardised transmission information, while detailed project geography develops through separate land, planning and Gate-readiness processes.

A3.2.44 Some promoters may not yet have fixed or been required to provide a final development boundary. Others may have provided NESO with substantially more detailed information than the public TEC entry reveals. Connections Reform makes the latter possibility especially material for projects that have sought Gate 2 treatment through land-readiness evidence.

A3.2.45 For the Great Moulton analysis, the correct inference is cautious but important. Public spatial uncertainty is neither proof of immaturity nor evidence of concealment. It is an information gap the ExA can legitimately test where material to the cumulative and reasonably foreseeable effects of a permanent 400 kV transmission hub.

Appendix 3.3: Environmental Information Regulations request to NESO - 21 September 2026

Dear Information Rights Team,

Please treat this as a request under the Environmental Information Regulations 2004.

Please provide any recorded information that NESO holds and can disclose about the actual or indicative physical location of the following projects:

1. Wacton Road Farm, understood to be the Wacton Hall Farm BESS – PRO-004440.
2. Norwich Main BESS, promoted by Tasway Energy Park Limited – PRO-003894 (stages PRO-003894-1 and PRO-003894-2).
3. RPC Elmya Gissing – please identify the relevant current or former TEC Project Number.
4. Noventum – Long Stratton – PRO-004405.
5. Long Stratton 400, promoted by Enso Green Holdings X Limited – PRO-004868.

This should include any coordinates, plans, maps, parish or locality information, indicative search areas, or other information indicating where each project is or is expected to be situated.

If NESO cannot disclose an exact location, please provide the most detailed approximate location that can be disclosed.

Yours faithfully,

Rob Shipway

Objection 4 – In-combination Cumulative Impact

Context

This objection follows directly from Objection 3. Objection 3 asks whether the connection and project evidence identifies a credible Great Moulton Energy Hub and uses an indicative 0-15 km catchment and six geographical quadrants to organise the spatial enquiry. This Objection 4 asks the different question which follows if that hub scenario is reasonably foreseeable: what are the cumulative and in-combination landscape, visual and construction consequences of introducing East Pye Solar (EPS), the new 400 kV transmission node and other credible solar, BESS, substation, cable and associated infrastructure into the same wider rural landscape? Drawing 4.1 is used here as an explicitly speculative sensitivity plan. It does not predict sites. It shows the known EPS and Tasway geography and illustrates alternative broad search areas for the three large Table 3.1 projects whose public locations remain undefined. The objection also tests a deliberately demanding 2028-2033 construction-overlap scenario. Neither exercise assumes that every identified project will proceed; both are intended to ensure that uncertainty does not become a reason for assessing East Pye as though it were spatially, functionally or temporally isolated.

What the Examination needs to cover

I respectfully suggest that the Examination should cover:

- whether the Environmental Statement has assessed cumulative effects at the geographical scale created by the proposed Great Moulton (Long Stratton) transmission node, rather than only by reference to East Pye's red line and a conventional list of nearby schemes;
- whether the credible hub scenario identified in Objection 3 should be tested through a reasonable worst-case or sensitivity assessment, distinguishing defined projects from spatially uncertain projects and avoiding any assumption that all will proceed;
- whether cumulative landscape and visual effects have been assessed as simultaneous, successive and sequential experiences, including journeys through the area, public rights of way, settlement edges and repeated encounters with energy infrastructure;
- whether the relative continuity of the South Norfolk clayland landscape means that effects in separate quadrants may combine across a wider area rather than being contained within sharply separated landscape compartments;
- whether the full electrical infrastructure is included in the assessment: the NGET 400 kV substation, East Pye substations, BESS, transformers, overhead-line alterations, cable corridors, access, drainage and any later connection infrastructure that is sufficiently foreseeable;
- whether planting, bunding and other mitigation would remain effective when several projects are considered together, including the time needed for planting to establish and the extent to which major electrical structures remain visible above screening;
- whether a reasonable construction-overlap scenario should be tested for 2028-2033 (with a wider 2027-2034 sensitivity), including cumulative HGV and abnormal-load movements, temporary traffic management and road closures, dust, noise, lighting, public-rights-of-way disruption and pressure on local services and communities; and

Questions to relevant organisations

I would suggest that the following questions should be asked of the relevant organisations so that the Examining Authority can form a properly evidenced view:

- **Applicant** - What geographical area and project list have been used for the cumulative landscape and visual assessment, and how do they respond to the Great Moulton hub scenario and six-quadrant framework identified in Objection 3?
- **Applicant** - Has a sensitivity or reasonable worst-case assessment been undertaken for credible projects whose exact boundaries are not yet public; if not, why is project-location uncertainty treated as sufficient reason not to test the wider cumulative scenario?
- **Applicant** - How have simultaneous, successive and sequential effects been assessed for settlements, public rights of way and road users moving through the wider Great Moulton hinterland?
- **Applicant** - Does the cumulative LVIA include the complete set of transmission and project electrical infrastructure, including the new NGET substation, line turn-ins, project substations, BESS, transformers, cable works, accesses and associated compounds?
- **Applicant** - What assumptions are made about screening and planting across separate projects, what establishment periods are assumed, and how is the possibility of visible infrastructure above or beyond planting accounted for?
- **South Norfolk Council** - Does the Council consider that the applicant's cumulative landscape study area and methodology properly reflect the scale and continuity of the receiving clayland landscape and the potential concentration of energy infrastructure around Great Moulton?
- **NESO and NGET** - Without duplicating the project-identification questions in Objections 2 and 3, what information can be provided about the scale and broad geography of credible future connections that should inform the reasonable cumulative landscape scenario?
- **Applicant and relevant authorities** - If the hub scenario cannot presently be assessed project by project because locations or programmes remain uncertain, what aggregate, quadrant-based and temporal sensitivity testing has been undertaken to demonstrate that the landscape and construction conclusions are robust?
- **Applicant** - What is the current assumed construction programme for East Pye and the Great Moulton electrical works, and what sensitivity testing has been undertaken for overlap with other projects using the same local highway and abnormal-load network?
- **NESO, NGET and relevant promoters** - What broad delivery windows can presently be identified for the Table 3.1 projects, and could confirmation of the Great Moulton connection cause several projects currently constrained by grid uncertainty to move into procurement and construction within a relatively short period?

Formal Objection 4

I object to the East Pye Solar DCO insofar as the Environmental Statement and Examination evidence do not yet demonstrate that the cumulative and in-combination landscape, visual and construction effects of the reasonably foreseeable Great Moulton

Energy Hub have been assessed at the appropriate spatial and temporal scale. If the DCO facilitates a new permanent 400 kV node capable of serving or materially assisting other credible projects, the decision should not be taken on an assessment which treats East Pye and its connection infrastructure as an isolated endpoint or assumes its construction programme can be considered in isolation. The Examination should test the wider hub scenario identified in Objection 3, including a proportionate spatial sensitivity assessment where project geography remains uncertain and a transparent overlap scenario where construction programmes remain uncertain, before the planning balance is struck.

Reasoned justification

4.1 Scope of this objection

- 4.1.1** This objection begins with the project cohort and 0-15 km spatial framework established in Objection 3 and asks what that evidence could mean in landscape, visual and construction terms if a Great Moulton Energy Hub is reasonably foreseeable. It does not repeat the project-identification case. Its purpose is to test the environmental consequences of the spatial and temporal pattern which might follow.

4.2 The cumulative assessment question

- 4.2.1** The cumulative issue is not whether every hypothetical future scheme must be assessed, nor whether every TEC or Gate 1 project identified in Objection 3 will proceed. The relevant question is whether the available evidence identifies development which is sufficiently foreseeable, sufficiently connected to the proposed node, or sufficiently plausible as a sensitivity scenario to affect the robustness of the Environmental Statement.
- 4.2.2** For the purposes of this objection, cumulative effects are principally the additional or interactive effects which arise when East Pye is considered with other existing, consented, proposed or reasonably foreseeable development. In-combination effects are used in the broader practical sense of different components, pathways or types of disturbance acting together on the same receptor or area - for example solar arrays, substations and BESS changing landscape character while construction traffic, noise, lighting and public-rights-of-way disruption affect the same community. The terms overlap in practice; this distinction is explanatory rather than an attempt to create separate legal tests.
- 4.2.3** Four related forms of effect therefore need to be kept in view: intra-project effects from East Pye's own components; inter-project effects with other development; network-enabled effects arising because a new 400 kV node may change the practical opportunity for later connections; and the accumulated experience of the landscape, including simultaneous, successive, sequential and temporal exposure. A project-list exercise alone may be insufficient if it does not test the consequence of the proposed transmission node changing the development baseline.

4.3 Policy and methodological framework

- 4.3.1** The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 require the Environmental Statement to describe likely significant effects, including

cumulative effects, on the basis of available information and current knowledge. The obligation is proportionate, but it requires enough information for the decision maker to understand the likely significant environmental effects of the development⁵⁷.

- 4.3.2** EN-1 provides the overarching energy-policy framework. The strong national need for low-carbon generation and electricity networks is an important part of the planning balance, but it does not displace the requirement to identify and assess adverse cumulative effects before that balance is undertaken⁵⁸.
- 4.3.3** EN-3 is particularly relevant because it recognises the landscape and visual implications of large-scale solar development and the relevance of cumulative assessment, while also recognising that grid-connection considerations influence location. EN-5 is directly relevant to the landscape and visual effects of electricity-network infrastructure, including substations and overhead-line works^{59,60}.
- 4.3.4** Planning Inspectorate advice on cumulative effects assessment provides a staged method: establish the zone of influence, identify other development, apply transparent inclusion criteria, gather information, assess effects and document assumptions and exclusions. The practical significance for East Pye is that the Examination can test whether the applicant's study area and project list remain adequate as new connection and planning evidence emerges⁶¹.
- 4.3.5** The cumulative framework is therefore capable of addressing the Great Moulton issue. The more difficult question is evidential: whether the project list, search area and treatment of spatial uncertainty are sufficiently wide and transparent to make that framework effective.

4.4 The receiving landscape

- 4.4.1** Natural England places the proposed node within National Character Area 83, South Norfolk and High Suffolk Claylands. At broad scale this is a connected lowland landscape of chalky till plateau, generally flat or gently undulating landform, predominantly arable cultivation, dispersed settlement and a recurring framework of hedges, trees and small river valleys⁶².
- 4.4.2** The South Norfolk Landscape Character Assessment subdivides the wider hinterland into more detailed areas, including E2 Great Moulton Plateau Farmland, B1 Tas Tributary Farmland and B4 Waveney Tributary Farmland. These are not identical landscapes, but the evidence identifies a family resemblance across substantial parts of the catchment: agricultural land use, generally gentle topography, medium-to-large field patterns, dispersed rural settlement and hedgerow structure⁶³.
- 4.4.3** This relative continuity matters differently in this objection than it did in Objection 3. In Objection 3 it supports the limited proposition that there is no obvious landscape-geographical hard edge which confines the search for spatially uncertain projects to one or two sectors. In Objection 4 it raises the converse cumulative question: whether development in separate sectors could be experienced as repeated elements of one

wider energy landscape rather than as effects contained in separate landscape compartments.

- 4.4.4** The Council's Landscape Susceptibility in relation to Energy Generation, Storage and Transmission Supplementary Planning Document reinforces an important distinction: technical or commercial attractiveness is not the same as landscape capacity. Land which is physically capable of accommodating energy infrastructure may remain sensitive to solar arrays, BESS compounds, substations, overhead lines and cable-related works⁶⁴.
- 4.4.5** Across the 15 km search area there is nevertheless a substantial degree of landscape homogeneity. The E2 plateau and the adjoining B1 and B4 tributary farmlands are not interchangeable, but all are predominantly agricultural landscapes with recurring arable land, hedgerow trees, rural lanes, dispersed or linear settlement and relatively gentle relief. The principal differences are of degree: E2 is generally flatter, more exposed and larger in scale; B1 is gently undulating with shallow tributary valleys and wooded horizons; and B4 becomes more dissected, more enclosed and more finely grained towards the Waveney valley while remaining broader and more open on its higher northern ground^{65,66,67}.
- 4.4.6** That family resemblance is important to the cumulative assessment. The six quadrants are analytical sectors, not six separate landscape compartments. A project several kilometres from the Great Moulton node may therefore be experienced as part of the same broad clayland energy landscape, particularly where open fields, long or framed views, repeated pylon infrastructure and similar settlement-edge conditions allow one development to be read in the context of another.
- 4.5 Broad landscape characteristics, constraints and opportunities across the six quadrants**
- 4.5.1** The 0 - 15 km catchment is used as a proportionate sensitivity area rather than an engineering limit. Within it, the broad landscape characteristics can help the Examination understand where large renewable-energy development may be physically easier or harder to accommodate, but they should not be turned into a site-selection exercise. The absence of an obvious constraint does not establish planning acceptability, and a landscape constraint does not prove technical impossibility.
- 4.5.2** The most important spatial variables are field scale and continuity, enclosure by hedges and woodland, settlement density, shallow river and tributary valleys, major transport infrastructure and the legacy or continuing use of former wartime airfields. Large, flatter arable blocks may appear technically attractive for solar or BESS; smaller fields, stronger hedgerow structure, wooded horizons, valley landform and closer settlement may increase landscape, access, heritage or ecological sensitivity. These are perceived constraints and opportunities only, not conclusions on suitability.

- 4.5.3** The Norwich-Diss railway and the A140 are particularly relevant. They can increase the engineering, land-rights, construction and consenting complexity of cable routes and may therefore influence which side of the corridor is commercially attractive. They are not absolute barriers: East Pye itself demonstrates that major roads and railway infrastructure can be crossed where a satisfactory design and approvals are achieved. For cumulative assessment, the more important point is that repeated crossings, temporary works and cable corridors can add to construction effects even where the completed cable is underground.
- 4.5.4** Airfields require a more nuanced treatment. Tibenham is a former USAAF heavy-bomber airfield but remains in active aviation use by Norfolk Gliding Club, with three substantial runways and regular gliding and general-aviation activity. Its large, flat and comparatively open landform may superficially resemble an opportunity for large-scale development or cable routing, while its active flying use, safeguarding requirements and aviation safety considerations can operate strongly in the opposite direction. The same broad point applies elsewhere in the search area. Hardwick is a former wartime bomber airfield now principally returned to agriculture with limited aviation use, while Old Buckenham, west of Carleton Rode, remains an active aerodrome. The wartime airfield legacy therefore creates both unusually large or altered land parcels and potential aviation, heritage and operational constraints. It should be mapped rather than treated generically^{68,69,70}.
- 4.5.5** A preliminary review does not support relying on a more specific assertion that particular public rights of way were removed during wartime airfield construction and never reinstated. That may be capable of verification from definitive-map and historic mapping evidence, but it should not be stated as fact here without that evidence. The more robust point is that airfield construction materially altered field patterns, levels, hedgerows and access arrangements in parts of this landscape, leaving a legacy which may still affect present-day landform and development opportunity.

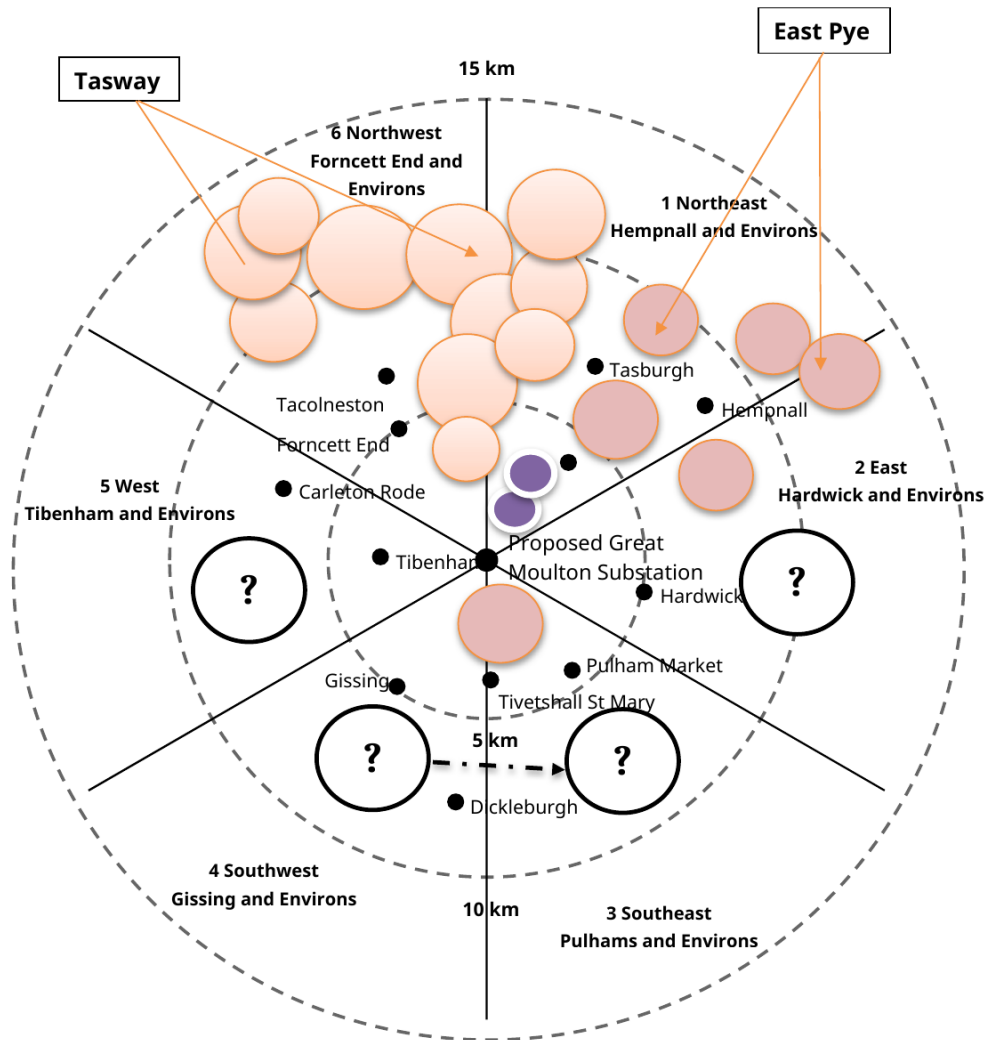
Table 4.1 - Broad landscape characteristics and matters to test across the six quadrants

Quadrant	Broad landscape characteristics	Perceived constraints / opportunities	Cumulative/ in-combination issue to test
1 Northeast - Hempnall and Environs	Mixed plateau/tributary farmland. Predominantly arable, with medium-to-large fields, open or framed views, scattered woodland and hedgerow trees. Hempnall, Tasburgh and smaller settlements introduce a stronger settlement-edge influence. East Pye/Tasway already create a renewable-energy context.	Existing and proposed energy infrastructure; settlement edges and PROW; wooded horizons; local valleys and hedgerow structure. Former Hardwick airfield lies farther east/northeast within the broad search area and illustrates the wartime airfield legacy.	Whether additional development would intensify an existing concentration so that separate schemes are perceived as one broad energy landscape rather than isolated sites.
2 East - Hardwick and Environs	Generally open arable countryside with substantial larger fields on higher ground, but with local woodland, hedges and settlement creating pockets of enclosure. The landscape remains visually connected to adjoining plateau farmland.	Railway/A140 and cable-crossing complexity depending on route; Hardwick settlement and rural lanes; former Hardwick airfield, partly returned to agriculture and with residual aviation/heritage interests. Large altered land parcels may be technically attractive but are not unconstrained.	Whether development east of the node would broaden the hub across the transport corridor and produce simultaneous or sequential views with East Pye and the Great Moulton electrical complex.
3 Southeast - Pulhams and Environs	Transition into B4 Waveney Tributary Farmland. Higher northern ground remains relatively open with larger arable fields; farther south the land becomes more undulating, with smaller fields, stronger hedges, tributary valleys, woodland and more frequent settlement around the Pulhams and Tivetshalls.	River/tributary valleys, settlement and heritage settings, more intricate field pattern to the south, woodland and ecological features; railway and A140 crossings for some connection routes. Larger higher-ground field blocks may appear more technically straightforward.	Whether a large scheme here would extend the energy landscape into a different but still related rural sector and create combined landscape, traffic, cable and construction effects over a wider area.
4 Southwest - Gissing and Environs	Predominantly B4 character: more varied field pattern and undulating tributary farmland, with smaller and medium fields, mature hedgerow trees, woodland, linear villages, churches and locally intimate valley landscapes. Higher ground towards Tivetshall is broader and more open.	More intricate settlement/heritage pattern; hedges, woodland and tributaries; potential need to cross railway/A140 depending on connection route. The 'Gissing' project name should not be treated as evidence that a very large site is centred on Gissing itself.	Whether development would create a separate but perceptually connected concentration and whether the contrast between open higher ground and intimate village/valley landscapes changes the scale or significance of cumulative effects.
5 West - Tibenham and Environs	Largely open plateau farmland with extensive arable fields, sparse boundaries, expansive skies and scattered settlement. Tibenham/Pristow Green airfield is a conspicuous large, flat wartime landscape feature and remains in active gliding/general-aviation use.	Active aviation and safeguarding are substantial constraints at Tibenham, but the scale, flatness, hardstanding and coherent land parcels associated with wartime airfields can also appear technically attractive. Old Buckenham, toward Carleton Rode, provides a further active-airfield constraint within the wider western search area.	Whether development west of the node would materially widen the hub footprint, and whether airfield-related openness would increase visibility even if land assembly or engineering appeared comparatively straightforward.
6 Northwest - Forncett End and Environs	Much of the sector has B1 Tas Tributary Farmland characteristics: open to semi-enclosed large arable fields, gentle slopes and shallow tributary valleys, scattered deciduous woodland, remnant oaks, wooded horizons and a dispersed network of villages, hamlets and rural lanes.	Shallow valleys and damp grassland; woodland and hedgerow structure; settlement and narrow-lane network; existing/proposed activity around Forncett, Aslacton and Wacton. The landscape is not a blank development area despite its broad agricultural character.	Whether additional BESS, solar or cable development would connect the northern and western sides of the hub and create repeated effects on rural routes, settlements and PROW.

4.6 Drawing 4.1 - spatial sensitivity exercise

- 4.6.1** Drawing 4.1 brings the spatial issue into this objection. It centres on the proposed Great Moulton (Long Stratton) substation and shows indicative 5 km, 10 km and 15 km radii together with the six neutral quadrants used in Objection 3. It overlays the publicly understood East Pye Solar and Tasway geography and then uses question-mark symbols to illustrate broad areas in which spatially undefined renewable-energy projects might conceivably lie. The drawing is a simple diagram, not to scale, and is deliberately not a site-selection plan.
- 4.6.2** The question-mark symbols are particularly important to interpret correctly. Drawing 4.1 identifies three very large projects whose public development geography remains insufficiently defined: RPC/Elmya Gissing BESS & PV (or any reformulated successor), Noventum - Long Stratton and Long Stratton 400. The drawing these as three question mark positions because those symbols represent alternative search areas, not separate projects and not a one-to-one allocation of a named project to a particular location. The map is therefore an illustration of uncertainty rather than an assertion of fact.
- 4.6.3** East Pye and Tasway are shown because they provide an important spatial reference. They demonstrate that substantial renewable-energy development is already concentrated or proposed on one side of the Great Moulton hinterland. The unanswered Examination question is whether one or more of the three spatially undefined Table 3.1 projects could occupy different sectors - for example towards Hardwick, the Pulhams/Tivetshalls, Gissing or Tibenham - and thereby create a much wider cumulative pattern converging on the same transmission node.
- 4.6.4** This is highly speculative. The drawing should not be used to infer land ownership, promoter intention, planning suitability or a preferred location. Its purpose is to make the uncertainty testable. The ExA should obtain the best available broad geography, Original Red Line Boundary, land-readiness and likely cable-route information from NESO, NGET and the promoters, replace these illustrative possibilities with evidence where it exists, and then assess the resulting cumulative pattern. If the evidence shows that one or more projects has no connection with these sectors, the corresponding hypothesis falls away; if it identifies other sectors, the sensitivity plan should be amended accordingly.

Drawing 4.1 Great Moulton (Long Stratton) Substation and Potential Locations for Known but Publicly "Footloose" Renewable Energy Projects
Indicative 5 km, 10 km and 15 km Radius Plan
Simple diagram - not to scale



All distances measured radially from the proposed Great Moulton (Long Stratton) substation.

Northeast Hempnall and Environs

No.	Quadrant	Description
1	Northeast	Hempnall and Environs
2	East	Hardwick and Environs
3	Southeast	Pulhams and Environs
4	Southwest	Gissing and Environs
5	West	Tibenham and Environs
6	Northwest	Fornsett and Environs
Map symbol key - copy/drag marker to plot		
●	Settlement	
○	Solar farm	
●	BESS	
?	Possible location of spatially undefined Renewable Energy projects	

4.7 Types of cumulative landscape and visual effect

- 4.7.1** Simultaneous effects arise where more than one project or item of electrical infrastructure is visible from the same location. The assessment should consider not only solar arrays but the vertical and industrial elements which may remain visible above or beyond screening, including substations, transformers, gantries, line turn-ins and associated compounds.
- 4.7.2** Successive effects arise where a receptor turns or moves a short distance and encounters a different project or component. A landscape may therefore feel increasingly occupied by energy infrastructure even where no single viewpoint contains every element at once.
- 4.7.3** Sequential effects are particularly important on public rights of way and local roads. A person travelling through the catchment may encounter one solar area, then cable or road works, then the transmission node, then a BESS or another solar site. The planning significance lies in the accumulated journey and change in countryside experience, not merely in the visibility of individual schemes from fixed viewpoints.
- 4.7.4** Temporal effects also matter. Projects need not be constructed at exactly the same time to combine. Overlapping construction periods may extend disturbance, while successive construction may create a prolonged period in which the landscape is repeatedly disturbed before planting and restoration associated with earlier schemes have matured.

4.8 The significance of electrical infrastructure beyond the solar arrays

- 4.8.1** The hub scenario is not simply a question of adding areas of photovoltaic panels. Each large project can bring project substations, transformers, BESS compounds, fencing, access roads, drainage, cable corridors and construction compounds. At Great Moulton those elements would sit alongside the new NGET 400 kV substation and overhead-line works. The cumulative landscape assessment should therefore be infrastructure led as well as panel led.
- 4.8.2** That distinction is important because some electrical structures are taller, more visually assertive and longer-lived than the solar arrays they serve. The permanent transmission node may remain after East Pye's generating infrastructure is decommissioned. If later projects use the same node, the landscape effect may therefore evolve over time rather than simply arise and disappear with one solar scheme.
- 4.8.3** Underground cabling can reduce operational visual effects but does not remove construction effects, land disturbance, access requirements or the need for transition, sealing-end or substation infrastructure. The Examination should avoid treating underground connection as equivalent to no landscape consequence.

4.9 Mitigation and the risk of fragmented screening

4.9.1 Landscape mitigation for one project is commonly designed around that project's own boundaries, viewpoints and receptors. A hub scenario raises a different question: whether multiple separately designed planting belts, bunds, fences and compounds would read together as effective landscape integration or as a repeated engineered pattern which itself changes rural character.

4.9.2 Planting also takes time to establish and cannot be assumed to screen all elements. The assessment should distinguish year-one, intermediate and mature effects and identify those structures whose scale or position means that screening would remain partial. Where several schemes are considered together, the period before mitigation becomes effective may be materially important.

4.9.3 Mitigation should therefore be tested cumulatively. It is not sufficient to show that each project can reduce its own effects if the combined outcome would still produce a wider pattern of electrical infrastructure across several parts of the same landscape.

4.10 Construction and restoration as cumulative landscape effects

4.10.1 Construction effects are relevant to landscape character as well as transport. Temporary compounds, haul routes, soil storage, cable trenches, vegetation removal, lighting, cranes and HGV activity can create conspicuous and moving elements across a rural landscape. If several large projects overlap or follow one another, the duration and geographical spread of those effects may be substantially greater than East Pye's programme considered alone.

4.10.2 A proportionate assessment should therefore consider plausible overlap and sequencing, not only identical construction dates. It should identify whether common roads, rights of way, settlement approaches and landscape receptors could experience repeated phases of disturbance and whether restoration assumptions remain realistic when adjoining projects are themselves under construction.

4.11 Multiple construction events - illustrative 2028-2033 scenario

4.11.1 A deliberately speculative construction scenario is set out below using the projects identified in Table 3.1. It asks what could happen if a material number moved into construction during 2028-2033. The dates are not forecasts, promoter programmes or findings that any project will proceed. Some may not proceed, may be delayed beyond 2033, may be materially redesigned or may prove to overlap with another entry. The purpose is to provide a transparent scenario which the ExA can accept, reject or replace with its own reasoned assumptions.

4.11.2 Why 2028-2033? A 2028 start is used as an illustrative point because projects now under consideration would first need to pass through planning or DCO procedures, Connections Reform, financing, procurement and pre-construction stages. At the same time, the policy drive towards accelerated clean-power delivery, the Gate 2 connection-

offer programme and the commercial importance of securing finance and supply-chain capacity could cause presently uncertain projects to become materially more deliverable over a relatively short period. 2033 allows for slippage and later delivery. A wider 2027-2034 sensitivity is also appropriate.^{71,72,73}

4.11.3 There are reasons why construction could become bunched. Once a promoter has consent, land rights, a workable connection offer and finance, there can be strong reasons to progress procurement and construction without long delay. The Great Moulton transmission infrastructure may also be a common dependency: greater certainty over its timing and capacity could release several projects that are presently constrained by connection uncertainty. The reverse is of course also possible.

Table 4.2 - Illustrative named-project construction windows

Project / infrastructure	Illustrative window	Potential construction characteristics	Qualification
East Pye Solar, BESS and Great Moulton electrical works	2028-2031	Dispersed solar works; BESS/substations; cable routes; compounds; earthworks; HGV/workforce traffic; abnormal loads.	DCO, phasing, connection and actual construction duration may differ materially.
Field Long Stratton BESS	2028-2030	Concentrated BESS/electrical works; spoil and earth movements; transformers; HGVs on constrained roads.	Current Gate/connection position remains material; may start later, be redesigned or not proceed.
Wacton Road Farm / Forncett BESS	2028-2029	BESS compound; battery/transformer deliveries; cable/access works; HGV/workforce traffic.	Identity and precise connection arrangements require confirmation.
Tasway Energy Park	2029-2031	Potential extensive renewable-energy construction, cables, compounds, access works and sustained traffic.	Sensitivity assumption only; does not assert Gate 2, consent or Great Moulton connection.
Noventum - Long Stratton	2029-2032	Potential large solar/BESS land take; cable corridors; substations/transformers; prolonged construction activity.	Public development geography and programme remain insufficiently defined.
Long Stratton 400	2030-2033	Potential large solar/BESS programme; grid works; cable routes; abnormal-load movements.	No fixed public site or firm programme presently established.
Former RPC/Elmya Gissing BESS & PV / successor	2030-2033 (sensitivity only)	If a comparable project re-emerged: potentially very substantial solar/BESS, cable, substation and traffic effects.	Most speculative case; no basis to assert return, former scale or any particular site.

4.11.4 The table should be read as a sensitivity schedule, not as an attempted prediction. Its significance lies in the possibility that projects with different planning and grid histories could nevertheless converge on the same local transport, abnormal-load and service network during a relatively narrow period.

Table 4.3 - One possible 2028-2033 construction overlap

Project / infrastructure	2028	2029	2030	2031	2032	2033
East Pye / Great Moulton electrical works	Construction	Construction	Construction	Construction		
Field Long Stratton BESS	Construction	Construction	Construction			
Wacton Road Farm / Forncett BESS	Construction	Construction				
Tasway Energy Park		Construction	Construction	Construction		
Noventum - Long Stratton		Construction	Construction	Construction	Construction	
Long Stratton 400			Construction	Construction	Construction	Construction
Former Gissing / successor (sensitivity)			Construction	Construction	Construction	Construction

- 4.11.5** In this deliberately demanding case, 2029 and 2030 become the critical overlap years. In 2029, East Pye/Great Moulton works, Field Long Stratton, Wacton Road Farm/Forncett, Tasway and Noventum could all be in some stage of construction. In 2030, East Pye, Field, Tasway, Noventum and Long Stratton 400 could overlap, with the former Gissing proposition added only as a sensitivity. The significance would not simply be the number of sites but the extent to which they draw on the same rural highway network, abnormal load routes, haulage capacity, workforce, temporary accommodation, environmental health resources, highway inspection, emergency access and local community tolerance.
- 4.11.6** A cluster of overlapping projects could create repeated HGV flows through the same villages; successive or simultaneous abnormal indivisible load movements; temporary traffic signals, road closures and diversions; mud and dust deposition; construction noise and lighting across a wider part of the countryside; repeated interference with public rights of way; and little meaningful recovery period between one construction campaign and the next. Even where each promoter can demonstrate that its own traffic, noise or dust effect is manageable, the combined programme could create a materially different experience for local communities and services.
- 4.11.7** I do not suggest that the ExA should adopt these dates. It should obtain the best available programme information from the Applicant, NESO, NGET and named promoters, then substitute its own reasonable assumptions where firm programmes do not exist. It should test at least a central overlap case and a more demanding sensitivity case. If only two projects are reasonably capable of overlapping, the assessment should be based on two; if five or six could overlap, that larger case should be tested. Uncertainty over precise start dates should not itself become a reason not to assess temporal cumulative effects.
- 4.11.8** Some sensitivity testing should also be explored. Alongside the central 2028-2033 scenario, a wider 2027-2034 period would capture the possibility that a consented BESS starts earlier while later Gate 1 or reformulated projects slip beyond 2033. The purpose is not to manufacture an eight-year construction programme but to identify whether communities could experience a sequence of substantial construction events with only limited intervals of respite.
- 4.12 A proportionate examination approach**
- 4.12.1** The appropriate response to uncertainty is not to require a detailed environmental assessment of every conceivable scheme. A tiered approach can distinguish, firstly, geographically defined projects which can be assessed using available red lines and parameters; secondly, credible but partly uncertain projects which can be tested using known technology, capacity, connection point and broad geography; and thirdly, early or weakly evidenced projects which may remain on a long list but can still inform an aggregate sensitivity scenario.
- 4.12.2** That approach allows the Examination to avoid both extremes: assuming that all projects will proceed, and assuming that projects with incomplete public geography

have no relevance. The evidential work requested in Objection 3 is intended to move projects between those categories as NESO, NGET, promoters and planning authorities provide further information.

- 4.12.3** If the hub scenario proves materially narrower during the Examination, the cumulative landscape concern can be narrowed with it. If additional projects become geographically or contractually clearer, the assessment should be updated rather than leaving the consequences to be considered only after the enabling transmission node has become part of the baseline.

4.13 Reasoned conclusions

- 4.13.1** The legal and policy framework is capable of assessing cumulative effects, but its effectiveness depends on the adequacy of the project list, study area, spatial information and assumptions used.
- 4.13.2** The relative continuity of the receiving clayland landscape means that development in separate sectors should not automatically be treated as environmentally self-contained. The plateau, tributary farmland, transport corridors and wartime-airfield legacy create local differences in scale and constraint, but not a set of sealed landscape compartments. Several projects could therefore create simultaneous, successive, sequential and in-combination effects across a much wider rural area even where no single viewpoint contains the whole hub.
- 4.13.3** The cumulative assessment should include the complete electrical infrastructure and the construction as well as operational phases. It should test mitigation across the combined development pattern rather than assume that project-specific screening necessarily resolves the wider effect.
- 4.13.4** The Examination does not need to predict the final number or location of future projects. It does need to establish whether the hub scenario is sufficiently foreseeable to require a reasonable sensitivity assessment before the Great Moulton node is authorised and becomes part of the baseline for later proposals.

Objection 5 – Industrialisation of the Countryside

Context

There is a danger that the phrase ‘industrialisation of the countryside’ sounds more dramatic than the point actually being made. I do not suggest that renewable energy development would cover every field, or that the South Norfolk countryside would literally cease to be rural. The concern is more subtle. A landscape can remain predominantly green and agricultural in acreage, yet its character and the way people understand it can change materially if large-scale energy infrastructure becomes a repeated and expected presence.

For people who live in rural areas, amenity is not confined to the view from a front or rear window. It lies in the everyday experience of leaving a village, travelling along a quiet lane, walking a public footpath, riding a horse, cycling between settlements, seeing open skies and familiar field patterns, and experiencing relative tranquility. Rural life often involves trade-offs in access to services and infrastructure, and that makes it especially important not to treat the qualities which distinguish the countryside from an urban or industrial environment as expendable merely because they are difficult to express in a numerical matrix.

Nor is this an argument that the countryside should be preserved unchanged. Landscapes have always evolved. The planning question is whether the scale, repetition, duration and functional character of East Pye and its associated electrical infrastructure would cross a qualitative threshold: from countryside which contains infrastructure to an energy dominant infrastructure landscape in which the remaining countryside is increasingly subordinate to it.

This objection is about a simple point: East Pye should not be assessed only as a series of individual landscape and visual effects. The Examination should also determine whether the scale, distribution, electrical infrastructure, engineered mitigation, duration and enabling role of the Great Moulton (Long Stratton) connection would materially alter the character, identity, function and lived experience of this part of rural South Norfolk, amounting to an effective industrialisation of the countryside.

What the Examination needs to cover

I respectfully suggest that the Examination should cover:

- whether the Applicant has assessed industrialisation, sense of place, community identity and lived experience expressly, rather than assuming that conventional LVIA receptor conclusions answer those wider questions;
- whether East Pye is experienced as one dispersed but integrated energy development when people move between villages, along rural lanes and across public rights of way, rather than as isolated development parcels;
- whether the Great Moulton Electrical Transmission Complex Core, including the permanent NGET substation, East Pye project substations, BESS, transformers, overhead-line works, security, access and mitigation, creates a qualitatively different rural landscape;
- whether the proposal changes the functional identity of land from predominantly agricultural countryside to a landscape substantially organised around generation, storage and transmission of electricity;

- whether screening, bunds, berms and woodland belts genuinely integrate the development or instead replace openness with enclosure and create an engineered landscape whose form is dictated by infrastructure, and represent features that could reasonably be regarded as alien in the landscape;
- how the development would be experienced at construction, Year 1, intermediate years, Year 15 and in winter, including the long period before mitigation achieves its intended effect;
- whether the approximately 60-year operational life means that, for a substantial part of the existing community, the altered landscape should be treated as a long term experience rather than a temporary interruption;
- how the qualities identified in South Norfolk landscape evidence - quiet rural character, tranquility, openness, long views, expansive skies, rural lanes and settlement identity - are affected by the proposal;
- whether the permanent Great Moulton 400 kV node risks establishing an altered baseline in which later electricity infrastructure is more readily perceived as normal or expected; and
- how the industrialisation concern in this Objection 5 relates to, but remains distinct from, the direct landscape harm in Objection 1, proliferation in Objection 2, the potential energy hub in Objection 3 and the in-combination cumulative effects in Objection 4.

Questions to relevant organisations

I would suggest that the following questions should be asked of the relevant organisations so that the Examining Authority can form a properly evidenced view:

- **Applicant** - Where, in the Environmental Statement, is there an integrated assessment of the change from predominantly agricultural countryside to an energy-production and transmission landscape, as distinct from individual LVIA receptor assessments?
- **Applicant** - How has the assessment captured the sequential experience of residents, walkers, cyclists, riders and road users encountering different parts of East Pye and its electrical infrastructure during ordinary journeys through the area?
- **Applicant** - What assessment has been made of sense of place, place attachment and community identity, and how has the Applicant responded to its own recognition that landscape character and visual amenity can affect wellbeing, recreation and connection to nature?
- **Applicant** - Do the proposed landscape measures preserve existing openness, field pattern and visual relationships, or do they create new enclosure, engineered landform and development-led planting geometry?
- **Applicant** - How would the character of affected public rights of way and quiet rural lanes change even where infrastructure is successfully screened from direct view?

- **Applicant** - Has the significance of the permanent NGET substation been assessed not only as a visual receptor issue but as a permanent change in the functional identity of the Great Moulton locality?
- **Applicant and South Norfolk Council** - How have the current South Norfolk Landscape Susceptibility SPD and the established Landscape Character Assessment, including their references to quiet rural character, tranquility, openness, long views, expansive skies and settlement identity, informed the assessment?
- **Applicant and NGET** - What elements of the Great Moulton electrical infrastructure would remain after East Pye generation is decommissioned, and what would that permanence mean for restoration of the area's rural character?
- **Applicant** - Does the cumulative landscape assessment test whether repeated renewable energy and grid infrastructure can change the perceived identity of the wider locality even where no single viewpoint is completely dominated?
- **Applicant** — What, if any, threshold has been used to determine when repeated energy infrastructure becomes a defining characteristic of a Landscape Character Area rather than a series of separate localised effects?

Formal Objection 5

I object to the East Pye Solar DCO insofar as the Applicant has not demonstrated that the scheme, its electrical infrastructure and its mitigation can be accommodated without materially changing the character, identity, function and lived experience of a substantial area of rural South Norfolk from predominantly agricultural countryside to an energy-production and transmission landscape. The objection is not to renewable energy in principle: it is that the industrialising effect must be identified distinctly, assessed at the scale at which people actually experience the countryside, and given appropriate weight in the planning balance.

Reasoned justification

5.1 About this Objection and relationship with Objections 1 – 4 and 6 - 7

- 5.1.1** This Objection 5 forms part of the same deliberately structured sequence as Objections 1 - 4 and 6 - 7. Objection 1 sets out the direct landscape, visual and construction harms of East Pye itself. This objection does not reopen that full assessment. It takes the landscape evidence one stage further and asks what the development would mean for the identity and lived character of the countryside if its components are experienced together and over time.⁷⁴
- 5.1.2** Objection 2 considers the enabling role of the proposed new Great Moulton (Long Stratton) 400 kV substation and the risk that a permanent grid node facilitates later connections. Objection 3 considers the credible projects and other possibilities which could translate that risk into a de facto Great Moulton Energy Hub. Objection 4 considers the cumulative and in-combination environmental effects of that pattern. Objection 5 addresses a different question: at what point does the concentration and repetition of electricity infrastructure change what the countryside is, and how it is experienced?

5.1.3 Objection 6 then considers whether the same process operates at the still larger scale of a Norwich Main–Great Moulton–Yaxley Energy Corridor, while Objection 7 deals separately with BESS fire and hazard safety. The division is intentional. It prevents “industrialisation” from becoming a loose synonym for cumulative impact and gives the Examination a distinct planning question to answer.

5.1.4 As with Objection 1, the fact that this objection concentrates on one defined issue should not be taken as acceptance of matters dealt with elsewhere, nor as an attempt to count the same harm twice. The purpose is to identify a qualitative effect which can be missed when the assessment is divided into disciplines, receptors and development parcels.

5.2 What is meant by “industrialisation of the countryside”

5.2.1 The expression is used here in a planning and landscape sense, not as a slogan. It describes a transition in which utility-scale generation, storage, substations, transformers, overhead-line works, security infrastructure, engineered mitigation, access and operational activity become sufficiently extensive or repeated that they materially influence the organising identity of a rural landscape.

5.2.2 National energy policy itself recognises that good design goes beyond aesthetics and should produce infrastructure which is sensitive to place. EN-1 also states that landscape effects depend not only on landscape sensitivity but on the nature and magnitude of the change, and that projects should be designed carefully to minimise landscape harm.⁷⁵

5.2.3 EN-3 is equally important. It expressly recognises that grid capacity may influence the siting of solar development, requires consideration of cumulative effects where solar farms are located near other generating stations and infrastructure, and requires careful assessment of landscape, visual and residential amenity. The policy framework therefore does not support an assumption that a wide zone of influence becomes harmless merely because individual arrays are low profile or capable of partial screening.⁷⁶

5.2.4 The concept is also broader than visibility. A place may remain recognisably green, with many fields still in agricultural use, while nevertheless changing in identity because of what repeatedly frames views, determines access, changes enclosure, generates noise, introduces security features, alters routes and establishes a new dominant functional purpose.

5.3 Rural amenity, lived experience and the value of the ordinary countryside

5.3.1 The affected countryside is not a national park and much of it is not designated for landscape value. That does not make it an empty canvas. The everyday landscape of South Norfolk has value precisely because it is lived in: it contains homes, small settlements, farms, lanes, public rights of way and familiar relationships between villages and their agricultural setting.

5.3.2 Rural residents do not experience amenity only through a static view from a dwelling. They experience the landscape sequentially and repeatedly: driving out of a village,

walking a dog, cycling, riding a horse, using a footpath, visiting neighbours or simply travelling between settlements. A scheme distributed across a wide area can therefore have a different experiential effect from one compact development, even if each individual component occupies only a minority of the countryside.

5.3.3 It would be wrong to romanticise rural life or suggest that every resident makes the same choices. Rural communities can often experience fewer nearby services, weaker public transport and other practical disadvantages, and while some residents have deliberately chosen those trade-offs, others have not. The narrower planning point is that tranquility, openness, dark skies, quiet lanes and access to countryside can form an especially important part of the amenity which rural places provide. Those qualities should not be treated as residual merely because they are difficult to monetise or because the landscape lacks a national designation.

5.3.4 That proposition is strongly consistent with South Norfolk's own landscape evidence. The current Landscape Susceptibility material describes Tributary Farmland as "tamed and peaceful farmland" creating a "quiet rural landscape" and identifies tranquility experienced through agricultural landscape and public rights of way. The long-established Great Moulton Plateau assessment identifies openness, long views, expansive skies, quiet rural lanes and the individual identity of settlements among the area's principal sensitivities.⁷⁷⁻⁷⁸

5.3.5 The Applicant's own Environmental Statement also recognises landscape character and visual amenity as determinants capable of influencing mental wellbeing, sense of place, recreation and connection to nature. This point should therefore be carried through into the planning judgment rather than acknowledged in one technical chapter and then merely characterised – and in effect dismissed – elsewhere to a "schedule of viewpoints".⁷⁹

5.4 Patchwork development can still produce a landscape-scale change

5.4.1 This objection does not suggest that renewable energy infrastructure will occupy 100 per cent of the countryside. Most large solar schemes are inherently dispersed and often comprise a patchwork of fields, with more intensive electrical development concentrated at particular nodes, and East Pye is no different. The relevant question is not percentage coverage but whether the repeated presence of infrastructure materially changes the landscape's dominant character and legibility.

5.4.2 A relatively small number of strategically located compounds, cable corridors, pylons, substations, BESS sites and screened solar parcels can influence a much wider area than their fenced footprint. Their effect is mediated through views, movement, enclosure, noise, lighting, altered field relationships and the knowledge that otherwise rural routes now pass through or around major energy infrastructure.

5.5 Experience from other solar DCO examinations: rural character, sense of place and "industrialisation"

5.5.1 "Industrialisation of the countryside" is not a defined statutory test and should not be treated as a freestanding identifier which determines an application. However, the underlying concern has gained real traction in other large solar DCO examinations. In

Sunnica and Mallard Pass, the Examination considered the same constituent ideas: the conversion of an agricultural or rural landscape to an energy production landscape; the effect of scale and dispersal on rural character; enclosure; the way screening itself can alter character; the everyday experience of residents and users of public rights of way; and the extent to which large electrical infrastructure can introduce an industrial or utilitarian character. The terminology has varied, but the planning issue is recognisable.⁸⁰

- 5.5.2** Sunnica provides the clearest example. Approximately one third of the Relevant Representations referred to landscape or views, with many describing the extensive scheme as turning a largely agricultural landscape into a quasi-industrial one. The host authorities argued that its scale, fragmented layout and proximity to settlements could dominate and transform the local landscape, affect sense of place and expose residents to repeated visual and perceptual effects in their daily lives. They also raised place attachment as a consequence of the extent, duration and nature of the change.⁸¹
- 5.5.3** The Sunnica ExA gave substantial weight to those concerns. It concluded that the size, fragmented nature and proximity of the development would cause material harm to landscape character and visual amenity and significant adverse effects on residents' perception of their surroundings. It also found that increased enclosure would harm enjoyment and appreciation of the open landscape, and that planting which could mitigate local views would be less effective at the landscape scale in addressing an extensive change from a rural/agricultural landscape to an energy-production landscape. That is close to the meaning in which "industrialisation" is used in this Objection.⁸²
- 5.5.4** Sunnica does not provide a litmus test for the proposition that such effects require refusal. The ExA recommended that consent be withheld, but the Secretary of State granted the DCO after reaching different conclusions on a number of matters and on the overall planning balance, including the effectiveness and reversibility of mitigation. Its relevance here is therefore narrower and more useful: the Examination treated scale, fragmentation, enclosure, sense of place, daily experience and the transition towards an energy-production landscape as legitimate planning consequences requiring explicit assessment, even though the Secretary of State ultimately considered the benefits to outweigh the adverse effects.⁸³
- 5.5.5** Mallard Pass points in the same direction. The ExA expressly accepted that development may affect overall landscape character even where it is not visible from a public viewpoint, because landscape character is also influenced by how a place is perceived and experienced. It found that the solar development and onsite substation would clearly change the landscape from arable farmland to solar development, that associated solar stations would introduce an uncharacteristic utilitarian form, and that the substation would have an "industrial like character" inconsistent with the prevailing rural landscape. It also recorded concerns that fencing and screening along rights of way could create a corridor effect and significantly reduce the sense of being in open countryside.⁸⁴

5.5.6 The Mallard Pass ExA nevertheless recommended consent, and the Secretary of State agreed. Importantly, that did not erase the identified harm: the Secretary of State agreed that the development would cause considerable change to existing landscape character and visual amenity and gave those harms moderate negative weight in the planning balance. Mallard Pass therefore demonstrates that the issue is capable of having a real and weight-bearing planning effect without becoming an abstract objection to renewable energy in principle.⁸⁵

5.5.7 The lesson for East Pye is accordingly not that Sunnica or Mallard Pass establishes a new policy test called “industrialisation of the countryside”. It is that an ExA can and should look beyond whether individual arrays or compounds are visible from selected viewpoints and ask what the development does to the character, identity and lived experience of the rural landscape as a whole. In East Pye that inquiry is particularly pertinent because the dispersed solar development is combined with BESS, project substations, overhead line works and the new Great Moulton transmission infrastructure. The question is whether those elements, taken together and experienced over time, cross the same qualitative threshold from countryside containing infrastructure to a landscape substantially organised around energy infrastructure.

5.6 Why East Pye is particularly susceptible to this effect

5.6.1 East Pye is not a single compact solar field. The Order limits extend to approximately 1,212 hectares and the scheme is distributed across numerous sites and sub-sites, together with BESS, collector substations, cabling, security infrastructure and the connection to the proposed Great Moulton (Long Stratton) 400 kV substation.⁸⁶

5.6.2 That distributed form matters. Residents can encounter different components of the same project when leaving and entering villages, travelling along rural lanes, using public rights of way and moving through the Tas and tributary landscapes. The experience may therefore be cumulative in the ordinary, non-technical sense: repeated encounters with the same new functional land use.

5.6.3 The Applicant’s landscape baseline describes a predominantly flat plateau incised by small-scale wooded river valleys across a series of South Norfolk Landscape Character Areas and records areas of moderate to high tranquility and recreational access. Those baseline qualities are precisely the characteristics against which an industrialisation effect should be judged.⁸⁷

5.6.4 The absence of spectacular scenery does not reduce the issue to insignificance. Ordinary lowland countryside can possess a strong local identity through the combination of working farmland, dispersed settlements, hedge lined lanes, tributary valleys, farmsteads, open and filtered views, public paths and the visual relationships between neighbouring villages.

5.7 The Great Moulton Electrical Transmission Complex Core

5.7.1 The industrialising effect is not confined to solar panels. At Great Moulton the development brings together the proposed permanent NGET 400 kV substation, East Pye 400 kV project substations, BESS, transformers, reactive-power and cable infrastructure, overhead line works, security, lighting, access and landscape mitigation.

Objection 1 addresses their direct landscape and visual effects; this objection addresses what that concentration means for the identity of the locality.

- 5.7.2** The proposed NGET substation is particularly significant because it is intended to be permanent. East Pye's generation may be described as temporary over its operating life, but the transmission node can outlive it. That creates a potential asymmetry between restoration of solar land and continuing electrical infrastructure at the very place around which the scheme is organised.
- 5.7.3** The relevance of Objections 2 and 3 is therefore contextual. If the Great Moulton transmission node materially facilitates further connections, the industrialisation issue is not simply that more development may become visible. It is that the node can become an organising feature of land-use decisions and, over time, of the way the locality itself is understood.
- 5.7.4** The result need not be a continuous "energy park". A dispersed hub can still alter identity. Indeed, dispersal can spread the experiential effect by placing different elements along different routes and in different landscape compartments, making energy infrastructure a recurrent part of ordinary movement through the countryside.

5.8 Screening is not the same as preserving rural character

- 5.8.1** A central weakness in treating industrialisation as merely a visual issue is the assumption that successful screening equals successful landscape mitigation. Planting may reduce visibility of panels, BESS containers or electrical equipment from selected receptors, but it can simultaneously alter openness, field pattern, lane character and settlement relationships.
- 5.8.2** Extensive woodland belts, dense hedgerows, bunds and berms may themselves be conspicuous or uncharacteristic, even alien. Engineered earthworks and regular planting blocks can read as infrastructure-led forms where their principal purpose is to conceal equipment rather than respond to historic landscape structure.
- 5.8.3** Mitigation can therefore exchange one form of adverse change for another: visible equipment for engineered landform; open views for enclosure; residential visibility for a tunnel-like public path; or a plainly industrial installation for a conspicuously managed landscape designed to hide it.
- 5.8.4** The Examination should identify three propositions: reducing visibility; integrating development into the existing landscape; and preserving established openness, scale, pattern and legibility. A mitigation scheme can perform well against one proposition while failing the second and third.
- 5.8.5** This is also why the assessment should not compare only an unmitigated scheme with mature planting at Year 15. It should compare the existing landscape, construction, Year 1, intermediate years, Year 15, winter conditions and the altered character created by the mitigation itself.

5.9 Duration, reversibility and the altered baseline

- 5.9.1** Describing the solar development as temporary is legally relevant but incomplete as a description of lived experience. An operating period of about 60 years spans much or all

of an adult lifetime. Many existing residents may never experience a restored landscape. For those people the altered condition is long term in any conventional sense.

5.9.2 Restoration is also not necessarily a return to the previous baseline. Mitigation planting may acquire ecological, amenity or landscape value over decades. Removing it at decommissioning could create new harm, while retaining it could perpetuate altered enclosure, field pattern and visual relationships.

5.9.3 There is a further planning consequence. Once East Pye and the Great Moulton node are established, future applications may be assessed against a landscape already influenced by energy infrastructure. The first major intervention can therefore change the baseline against which later interventions are judged. Objection 4 addresses the formal cumulative-assessment implications; this objection addresses the related process of normalisation.

5.10 The policy framework supports a wider landscape judgment

5.10.1 The planning policy framework does not confine landscape assessment to nationally designated scenery or to direct visibility. EN-1 requires infrastructure to be sensitive to place and recognises that landscape effects arise from the nature and magnitude of change as well as receptor sensitivity. EN-3 requires cumulative landscape and visual effects of large-scale solar to be assessed and expressly recognises the relevance of nearby energy infrastructure.

5.10.2 The 2025 Appraisal of Sustainability underpinning the Energy National Policy Statements is particularly instructive in identifying protection of landscape character and local distinctiveness, tranquility, placemaking and sense of place as relevant sustainability objectives and concerns. It does not determine this application, but it confirms that these are legitimate dimensions of the environmental policy context rather than merely subjective objections to change.⁸⁸

5.10.3 South Norfolk's own evidence points in the same direction. The landscape strategy for Great Moulton seeks to conserve openness, expansive skies, rural lanes and settlement identity, while the newer susceptibility work identifies quiet rural character and tranquility within Tributary Farmland. The Examination should therefore ask not simply whether particular infrastructure can be screened, but whether the development is compatible with the qualities the local landscape evidence says are sensitive.

5.11 Overall conclusion

5.11.1 The substance of this objection is qualitative. It is that East Pye risks doing more than adding visible development to an otherwise unchanged countryside. Through its scale, distributed form, electrical infrastructure, permanent grid connection, security features, engineered mitigation and long duration, it may alter the organising identity and everyday experience of a substantial part of rural South Norfolk.

5.11.2 That conclusion does not depend upon predicting that every possible future energy project will be built. Nor does it depend upon saying that all change is harmful. It requires only recognition that landscape character and sense of place can be changed

by the repetition and normalisation of a new functional land use even where much agricultural land remains between individual development parcels.

- 5.11.3** The Examining Authority should therefore identify industrialisation as a distinct planning effect, test it against the Applicant's evidence and the South Norfolk landscape framework, and give it appropriate weight in the final balance. National need may be substantial, but need does not remove the requirement first to identify the nature and extent of the harm which would be accepted in meeting it.

Objection 6 – Creation of a Norwich Main – Great Moulton (Long Stratton) – Yaxley Energy Corridor

Context

This objection is about a simple point: by facilitating a new permanent 400 kV grid connection at Great Moulton (Long Stratton), East Pye could create an additional transmission node between the established substations at Norwich Main and Yaxley. The Examination should establish whether that new node, in combination with existing and prospective renewable-energy and storage connections to the north and south, could contribute to a wider and progressively more continuous corridor of electricity infrastructure whose cumulative effects have not been assessed as a whole.

What the Examination needs to cover

I respectfully suggest that the Examination should cover:

- the established pattern of generation, storage and associated electricity infrastructure connecting at Norwich Main and Yaxley, and what that pattern demonstrates about the capacity of major 400 kV nodes to attract or facilitate successive projects;
- the position of the proposed Great Moulton (Long Stratton) 400 kV substation between Norwich Main and Yaxley and whether its creation would materially alter the spatial opportunity for further renewable energy, storage, demand or network development;
- the projects and credible connection possibilities identified in Objection 3, not as projects assumed to connect at Great Moulton, but as evidence of the range of development that could become more technically or commercially feasible once an additional 400 kV node exists;
- the cumulative geography of Norwich Main, Great Moulton and Yaxley, including the approximately 29 km straight-line separation between Norwich Main and Yaxley and the wider area within which renewable-energy projects may connect to those transmission nodes;
- whether an indicative corridor extending around 15 km north of Norwich Main and 15 km south of Yaxley - approximately 60 km overall - and, for strategic scenario-testing only, up to approximately 60 km in width, is a reasonable spatial scale for testing the wider cumulative and in-combination consequences, while recognising that it is not a fixed network, development or planning boundary;
- the relationship between the proposed Great Moulton node, Norwich Main, Yaxley, Norwich to Tilbury and any planned or emerging East Anglian connection nodes or transmission reinforcements;
- whether the Environmental Statement has assessed the possibility that East Pye would be enabling infrastructure within a wider north-south concentration of renewable-energy and electricity-network development rather than only a self-contained project connection; and
- whether the cumulative landscape, visual, traffic, amenity, community and land-use consequences of that broader development pathway have been adequately identified and assessed.

Questions to relevant organisations

I would suggest that the following questions should be asked of the relevant organisations so that the Examining Authority can form a properly evidenced view:

- **Applicant** - Has the Environmental Statement assessed the Great Moulton (Long Stratton) grid connection in the wider transmission geography between Norwich Main and Yaxley, rather than solely as an East Pye project component?
- **Applicant** - Has the cumulative effects assessment tested a reasonable scenario in which creation of the Great Moulton node facilitates additional renewable energy, storage or associated electrical infrastructure of the kind identified in Objection 3? If not, why not?
- **Applicant** - What spatial study area has been used to test cumulative electricity-infrastructure effects north and south of the Order limits, and is that study area sufficient to capture connection led development associated with Norwich Main, Great Moulton and Yaxley?
- **NGET** - How does NGET understand the present and future network relationship between Norwich Main, the proposed Great Moulton (Long Stratton) substation and Yaxley, including any interaction with Norwich to Tilbury and other planned East Anglian reinforcement?
- **NGET** - Would establishment of a 400 kV node at Great Moulton materially increase the practical options for connecting later generation, storage, demand or network projects within the wider South Norfolk transmission corridor, even where those projects are located several kilometres from the substation itself?
- **NESO** - Provide a current, de-duplicated schedule of contracted projects connecting at Norwich Main and Yaxley, including project number, TEC, Gate status, effective connection date and technology, and identify any entries that are staged or duplicated.
- **NESO** - Does current connections-reform information identify additional projects, connection points or strategic network assumptions relevant to the broad Norwich Main – Great Moulton – Yaxley geography that are not apparent from the published TEC Register alone?
- **NESO and NGET** - Reconcile Table 6.1 in this Objection against Objection 3 Table 3.1 and Table A3.1 and against known Yaxley-area projects, specifically confirming whether Field Yaxley and Noventum Yaxley appear under different project/SPV names, whether any Table A3.1 projects have a Norwich Main, Yaxley or Great Moulton/Node A dependency, and whether the public TEC Register omits or obscures any relevant project because of naming, staging, technology-row or reform-status conventions.
- **Applicant, NGET and NESO** - What evidence do they rely upon to conclude that the establishment of Great Moulton should, or should not, be examined as a potentially enabling element within a wider north-south corridor of renewable-energy and electricity-network development?
- **Applicant** - Has the cumulative assessment tested whether a broader Norwich Main – Great Moulton – Yaxley corridor could amplify the cumulative and in-combination effects and countryside - industrialisation effects identified in Objections 4 and 5, including the additional but secondary context of Norwich to Tilbury?

Formal Objection 6

I object to the East Pye Solar DCO insofar as it would facilitate the creation of a new permanent 400 kV grid connection at Great Moulton (Long Stratton) between Norwich Main and Yaxley without the Examination first establishing whether that additional node, together with existing and prospective connections at the two established substations and the projects and possibilities identified in Objection 3, creates a credible pathway towards a wider Norwich Main – Great Moulton – Yaxley energy corridor and whether the reasonably foreseeable cumulative and in-combination environmental consequences of that pathway have been adequately assessed.

Reasoned justification

6.1 Introduction and Context in relation to Other Objections

- 6.1.1** This objection forms part of the same sequence described in Objection 2. Objection 2 addresses the enabling character of a new Great Moulton (Long Stratton) 400 kV node. Objection 3 considers the credible projects and other connection possibilities which may seek to take advantage of the new grid opportunity. Objection 4 addresses cumulative and in-combination effects, while Objection 5 considers the risk that repeated energy infrastructure could industrialise this part of the South Norfolk countryside.
- 6.1.2** Objection 6 takes the concern one stage further. It asks whether the proposed Great Moulton node, positioned between the established 400 kV substations at Norwich Main to the north and Yaxley to the south, could contribute to a broader longitudinal concentration of renewable-energy, storage and electricity-network infrastructure.
- 6.1.3** The objection does not assume that every project at Norwich Main or Yaxley is connected with East Pye, nor does it seek to predict which individual projects identified in Objection 3 will connect specifically at Great Moulton. The narrower point is that authorising a new 400 kV connection point changes the development opportunity structure across the wider area and therefore has consequences beyond East Pye itself.

6.2 Transmission geography and the scale of the potential corridor

- 6.2.1** Norwich Main and Yaxley are approximately 29 km apart in a straight line. Great Moulton (Long Stratton) would occupy an intermediate position on that same broad north-south transmission geography. The establishment of a further 400 kV node would therefore not occur in isolation but within a sequence of major transmission locations.
- 6.2.2** Renewable-energy and storage projects need not sit immediately beside the substation to which they connect. Cable routes and project substations allow generation and storage sites to be located several kilometres from a transmission node. For the limited purpose of understanding spatial scale, an illustrative 15 km extension north of Norwich Main and south of Yaxley produces a north-south area of influence of about 59 km, appropriately rounded to approximately 60 km. If, as a deliberately broad strategic

testing envelope, a similar approximately 60 km east-west width is applied, the resulting envelope would be about 3,600 km², equivalent to approximately 360,000 hectares.

- 6.2.3** Those approximately 60 km dimensions are not advanced as a fixed network boundary, a statutory study area, a development allocation or a prediction that development will occur continuously throughout an area of some 360,000 hectares. They are an indicative planning scale within which the Examination can test whether a north-south concentration of renewable energy and electricity infrastructure is reasonably foreseeable, how far the relevant connection catchments may extend laterally as well as longitudinally, and whether the cumulative implications have been captured.

6.3 NESO TEC Register evidence at Norwich Main and Yaxley

- 6.3.1** NESO publishes the Transmission Entry Capacity (TEC) Register, which identifies existing and future projects holding contracts for TEC. The latest register used for this review is dated 15 September 2026. NESO states that the register is updated twice weekly. Although it has a Gate field which is populated once Gate 1 or Gate 2 agreements have been countersigned, the present review has not independently reconciled Gate status for each project in Table 6.1. The table therefore records Gate status as unconfirmed where reliable project-level verification has not been possible, rather than inferring it from inclusion in the register.
- 6.3.2** Table 6.1 summarises the entries identified in the present review as connecting at Norwich Main and, separately, Yaxley. It is used comparatively: to show the range and scale of development associated with two established 400 kV nodes on either side of Great Moulton, not to assert a direct relationship between those projects and East Pye.

Table 6.1: Comparison of Contracted Connections at Norwich Main and Yaxley 400 kV Substations - NESO TEC Register

Part A – Connections to Norwich Main

Project	Customer/developer	Capacity/TEC	Plant type	Status/note
Hornsea Project Three	Hornsea Project Three (UK) Ltd/ Ørsted	3,000 MW ultimate TEC (staged)	Wind Offshore	Consented/construction activity. Gate: not independently confirmed. Potential timing: staged Norwich connection around 2026/2028. TEC: NESO 15.09.26, Norwich Main 400 kV.
Sheringham Shoal/ Dudgeon Extensions	Equinor-related project interests	c. 950 MW ultimate TEC	Wind Offshore	Future/development connection. Gate: not independently confirmed. Potential timing: from about 2030. TEC: NESO 15.09.26, Norwich Main 400 kV; stage attribution TBC.
Sheringham Shoal Offshore Wind Farm	Equinor / partners	c. 315 MW	Wind Offshore	Existing / operational generation. Gate: N/A. Timing: operational. TEC: NESO 15.09.26, Norwich Main 400 kV / Sheringham Shoal.
Great Yarmouth CCGT	RWE / predecessor interests	c. 420 MW	CCGT	Existing generation connection. Gate: N/A. Timing: operational. TEC: NESO 15.09.26, Norwich Main 400 kV / Great Yarmouth.
Hall Farm Energy Storage Project	Innova	400 MW	Energy Storage System	Planning permission July 2025; confirmed grid offer. Gate: not independently confirmed. Potential timing: associated Norwich Main works targeted by NGET for 2027. TEC: NESO review 15.09.26; project no./Gate TBC.
Norwich GREEN	Contracted customer project	c. 1,025 MW	Renewable/ associated generation	Contracted customer connection in NGET works material. Gate: not independently confirmed. Potential timing: 2027 (TBC). TEC cross-ref 15.09.26: exact public label not uniquely reconciled; NESO to confirm project no./Gate/effective date.
O&G Solar/solar-energy connection	Contracted customer project	c. 500 MW	Solar	Contracted customer connection in NGET works material. Gate: not independently confirmed. Potential timing: 2027 (TBC). TEC cross-ref 15.09.26: exact public label not uniquely reconciled; NESO to confirm project no./Gate/effective date.

Part B – Connections to Yaxley

Project	Customer / developer	Capacity / TEC	Plant type	Status / note
Glebe Energy Park	Project company / developer	800 MW	Solar PV + Energy Storage	TEC connection project. Gate: not independently confirmed. Potential timing: no reliable public start identified. TEC: NESO review 15.09.26, Yaxley 400 kV; project no./Gate/effective date TBC.
National Power Yaxley Green Energy Park	Yaxley Energy Ltd / formerly NP SPV 40 Ltd	1,000 MW	Energy Storage System	Connection offer; major prospective Yaxley connection. Gate: not independently confirmed. Potential timing: no reliable public start identified. TEC: NESO review 15.09.26, Yaxley 400 kV; project no./Gate/effective date TBC.
EcoPower Suffolk Solar	EcoPower Suffolk Ltd / Econergy	c. 250 MW	Solar PV + BESS	DCO development / pre-application; Yaxley connection identified. Gate: not independently confirmed. Potential timing: earliest construction H2 2028; grid connection end-2030. TEC: NESO review 15.09.26, Yaxley 400 kV.
Progress Power Station	Progress Power Ltd	299 MW	OCGT	Consented; construction activity evident. Gate: legacy/advanced; current field not independently confirmed. Timing: construction under way in 2026; operation planned from 2026. TEC: NESO review 15.09.26, Yaxley 400 kV / Progress Power.

Notes to accompany Table 6.1:

1. Source and date: NESO Transmission Entry Capacity (TEC) Register, latest published file dated 15 September 2026. NESO states that the register is updated twice weekly.
2. NESO cautions that capacity across stages and technology types is currently presented in aggregate and may result in duplicate entries. Capacity figures should therefore not be totalled mechanically without checking whether entries relate to stages or multiple technology descriptions for the same project.
3. The Gate field is populated only once a Gate 1 or Gate 2 agreement has been countersigned. A blank Gate field should not automatically be read as meaning that no connection agreement exists. Where Table 6.1 states that Gate status is not independently confirmed, that is deliberate: the project should not be assigned a Gate by inference.
4. This table is a comparative schedule of projects identified in the present review. It should not be treated as a definitive de-duplicated capacity total for either substation. The Examining Authority may wish to seek a current project-level extract from NESO/NGET identifying Project Number, Gate status, MW Effective From date and whether any entries are staged or duplicated.
5. Some contextual status descriptions, Gate commentary and timing indications draw on published project/NGET material as well as the NESO register. They are included to explain the nature and likely programme of the connection rather than to replace formal NESO contractual data.
6. Source: National Energy System Operator, Transmission Entry Capacity (TEC) Register, <https://www.neso.energy/data-portal/transmission-entry-capacity-tec-register> (accessed 17 September 2026).
7. “Potential commencement / effective timing” is not a new TEC field. Where the NESO contractual “MW Effective From” date is publicly identifiable it is the better network proxy; otherwise, the entry records the best published project programme. A project construction start and a contracted connection-effective date are not necessarily the same thing.
8. NGET evidence submitted in relation to Norwich to Tilbury has identified customer connections at Norwich Main including Hornsea 3, Equinor wind, Norwich GREEN, O&G Solar and Innova storage, and previously described the associated Norwich Main works as targeted for delivery from the later 2020s. These dates remain subject to project, consent and connections-reform changes.
9. Gate and programme information is especially fluid during Connections Reform. The table should therefore be read as a dated snapshot at 17 September 2026 and verified by NESO/NGET during Examination.
10. Cross-check with Objection 3 V8. Table 3.1 in Objection 3 contains the core Great Moulton/Long Stratton cohort, while Table A3.1 contains projects excluded from the core case but retained as a geographical and connection safety check. No Table 3.1 or Table A3.1 project is an exact project-name match with the projects presently displayed in Table 6.1. That absence should not be read as proof of non-connection: Objection 3 records that project names, promoter vehicles and connection-site labels can differ, and Table A3.1 expressly retains several Node A/Norwich-related projects because their physical connection remains uncertain.
11. Table A3.1 specifically identifies GF Norwich BESS, Intwood Farm BESS, Wymondham Road Farm, Swainsthorpe, Norwich Main, Old Stoke Road BESS, Land at Wood Farm and Cawston Road as safety-check entries. None is presently named in Table 6.1. This reinforces that Table 6.1 is a comparative schedule of identified projects rather than a complete inventory of every project which may have a Norwich Main, Yaxley, Node A or wider corridor relationship.
12. Field Yaxley and Noventum Yaxley provide a further caution. Field Yaxley is a consented 200 MW BESS south of Eye Airfield Industrial Estate and the promoter's published material identifies an underground cable connection to Yaxley substation; Noventum Power also publicly lists a Yaxley project. Neither project is identified under those public names in Table 6.1. This does not establish that either is absent from NESO's contractual records: a project may appear under a different SPV, working title, technology row or connection description, or may follow a route not represented by a straightforward TEC-name match. It does, however, demonstrate why the Examination should obtain a reconciled NESO/NGET project-level schedule rather than treating a name-search of the public TEC Register as exhaustive.

Why Cross Checking of NESO Register is important

- 6.3.3** The cross-check with Objection 3 is important because that objection deliberately distinguishes between the core Great Moulton cohort in Table 3.1 and the residual safety-check projects in Table A3.1. Table A3.1 includes projects whose names or apparent geography tend to suggest that there are some distance from Great Moulton, but whose Node A or wider network descriptions leave residual uncertainty. The fact that none of those Appendix projects appears by the same public project name in Table 6.1 does not resolve that uncertainty; it instead illustrates the limits of using project names alone to reconcile planning and connection evidence.
- 6.3.4** The same caution applies to the core Table 3.1 projects. There is no exact project-name duplication between Table 3.1 and Table 6.1. Tasway is particularly instructive because Objection 3 records that its promoter appears against a connection entry named Norwich Main BESS, while the relationship between that entry, Tasway and the eventual physical connection point requires verification. A project can therefore be relevant to the Norwich Main-Great Moulton-Yaxley geography without appearing under the public-facing development name used in the planning material.
- 6.3.5** Field Yaxley creates a similar issue at the southern end of the corridor. It is a real and geographically defined 200 MW BESS project south of Eye Airfield Industrial Estate, with planning permission granted in July 2025 and published Field material identifying an underground cable connection to Yaxley substation. Yet the project is not identified by the public name 'Field Yaxley' in the Yaxley projects presently listed in Table 6.1. That may simply mean that the relevant connection is recorded under another project company, contractual name or network route. It nevertheless means that absence from Table 6.1, or failure to find a public planning name in the TEC Register, cannot safely be treated as evidence that the project is outside the Yaxley connection cohort.
- 6.3.6** Noventum Power likewise publicly identifies a Yaxley project in its UK portfolio, while its Long Stratton project is separately recorded in Objection 3 as a 460 MW Gate 1 project at North Anglia Connection Node A 400 kV. The present Table 6.1 Yaxley schedule does not identify a project under the Noventum name. Again, this should not be converted into an assertion that NESO has omitted a contracted project: the public evidence available here does not establish the contractual identity, capacity, Gate status or precise connection route of Noventum's Yaxley project. It does, however, add weight to the need for NESO/NGET to reconcile promoter names, SPVs, project numbers, connection sites and public planning schemes.
- 6.3.7** The resulting evidential concern is therefore one of completeness and reconciliation rather than an allegation that the NESO TEC Register is inaccurate. NESO itself cautions that Connections Reform is producing staged and technology-related duplication, that Gate fields may remain blank until agreements are countersigned, and that data corrections may take time. For Examination purposes, the prudent course is to obtain a dated, de-duplicated project level extract for Norwich Main and Yaxley, cross-

referenced to the Existing Agreements Register and to known planning projects, including Field Yaxley, Noventum Yaxley and the Table A3.1 safety-check entries.

6.4 Relevance to the proposed Norwich Main – Great Moulton – Yaxley energy corridor

- 6.4.1** The comparison demonstrates that Norwich Main is already a major concentration point for a range of electricity generation and storage connections, including very large offshore wind projects and battery storage. Yaxley likewise shows a pattern of substantial prospective solar, storage and conventional generation connections. The technologies differ, but both substations illustrate how a strategic 400 kV node can become the focus for multiple projects over time.
- 6.4.2** The relevance to East Pye is not that the Norwich Main or Yaxley projects will be diverted to Great Moulton: it is that East Pye would facilitate the establishment of a new 400 kV connection point between two existing nodes which already demonstrate connection led concentrations of infrastructure. Once that additional node exists, it could make a wider range of renewable energy, storage and associated electrical projects technically or commercially more feasible, including projects and possibilities examined in Objection 3.
- 6.4.3** The spatial consequence could therefore be broader than a discrete Great Moulton hub. Norwich Main, Great Moulton and Yaxley may together form the principal transmission reference points for a more continuous north-south pattern of energy development.
- 6.4.4** The examination should distinguish prediction from risk appraisal. It need not find that every identified project will proceed or that every later project will connect at Great Moulton. It should, however, establish whether authorising the new node creates a credible pathway to additional development across the wider corridor and whether the reasonably foreseeable cumulative and in-combination effects of that pathway have been assessed.

6.5 Relationship to Objections 4 and 5: cumulative and in-combination effects and industrialisation of the countryside

- 6.5.1** The corridor concept adds a spatial dimension to the cumulative and in-combination concerns developed in Objection 4. The issue is not simply the number or aggregate capacity of projects. If successive solar, BESS, project substations, cable routes, access works and transmission infrastructure are concentrated around a sequence of 400 kV nodes, the same communities, roads, public rights of way and landscape receptors may experience repeated or overlapping effects over a much wider area and over a much longer period than would be apparent from assessment of each project in isolation.
- 6.5.2** Those effects may include sequential landscape and visual change; repeated construction traffic and abnormal-load movements; noise and lighting from electrical compounds; loss or fragmentation of agricultural land; additional fencing, bunding, planting and security infrastructure; and the progressive presence of substations, transformers, BESS compounds and other large-scale electrical equipment. In-

combination effects may therefore arise even where individual projects are separated by several kilometres and do not share an Order limit.

- 6.5.3** This is also relevant to the industrialisation concern developed in Objection 5. The countryside does not need to become continuously built up before its character can change materially. A repeated sequence of major energy compounds and connecting infrastructure, experienced on journeys, from settlements and from the rights-of-way network, could progressively replace an agricultural and rural baseline with one in which energy infrastructure becomes a defining characteristic. The establishment of Great Moulton as an additional 400 kV node could intensify that process by increasing the practical connection options available between Norwich Main and Yaxley.
- 6.5.4** Objection 6 therefore does not duplicate Objections 4 and 5. It provides the strategic geography within which those concerns should also be tested: whether East Pye would form part of, and potentially help enable, a broader longitudinal pattern whose combined environmental effects and effect on rural character are greater than the sum of the individual schemes considered separately.
- 6.5.5** Norwich to Tilbury is an additional contextual factor, but its significance should not be overstated. It is a separately promoted strategic transmission reinforcement with its own needs case and DCO process; it is not triggered by East Pye, and the existence of the proposed overhead line does not establish that a Norwich Main – Great Moulton – Yaxley renewable-energy corridor will arise. Its relevance is narrower: it would add a further conspicuous layer of 400 kV infrastructure to parts of the same broad East Anglian landscape, and the works at Norwich Main form part of the network context within which multiple customer connections are being accommodated.
- 6.5.6** The principal Norwich to Tilbury points are therefore summarised in Appendix 6.1 rather than allowed to dominate this objection. They support the need for the Examination to understand the wider transmission context, but the central case in Objection 6 remains the potential enabling role of a new Great Moulton node between Norwich Main and Yaxley and its relationship with the cumulative and industrialisation concerns in Objections 4 and 5.

6.6 Reasoned conclusion

- 6.6.1** Norwich Main and Yaxley provide relevant contemporary evidence of how major 400 kV transmission nodes can become associated with multiple generation and storage projects. Great Moulton would be a new intermediate node rather than merely an extension of either established substation.
- 6.6.2** The central issue for Objection 6 is therefore whether East Pye would do more than secure its own grid connection. By facilitating a new permanent 400 kV node at Great Moulton, the DCO changes the development opportunity across a much wider part of South Norfolk and contributes to a longitudinal concentration of renewable energy and

electricity network infrastructure extending between, and potentially beyond, Norwich Main and Yaxley.

- 6.6.3** That possibility is sufficiently material to justify direct evidence from the Applicant, NGET and NESO and a cumulative assessment which is capable of addressing the wider corridor scenario rather than treating Great Moulton, Norwich Main and Yaxley as unrelated points on the transmission system. The cross-check with Objection 3 and with known Yaxley-area projects also shows why the public TEC Register should not be treated as a self-proving or exhaustive project inventory: the Examination needs a reconciled, dated schedule linking public project names, promoters/SPVs, Gate status, project numbers, connection points and effective dates.

Appendix 6.1 – Norwich to Tilbury: additional transmission context

A6.1.1 Purpose and weight

This Appendix summarises the additional Norwich to Tilbury factor identified in the separate corridor note. It is intentionally treated as supporting context rather than as a central plank of Objection 6. Norwich to Tilbury has an independent strategic justification and a separate consenting process. Its existence should therefore not be used as proof that East Pye will generate other projects or that a continuous energy corridor is inevitable.

A6.1.2 Current project position

Norwich to Tilbury is National Grid Electricity Transmission's proposed new 400 kV connection of approximately 180 km from Norwich Main via Bramford, a new East Anglia Connection Node and a new Tilbury North Substation. The scheme includes substantial new overhead line, underground cable sections, new substations and extension works at Norwich Main and Bramford. Its DCO examination closed on 10 August 2026, and the project is now at recommendation stage; National Grid states that, if consent is granted, construction is expected to begin in 2027.

A6.1.3 Relationship with Norwich Main

The relationship with Norwich Main is more directly relevant than the southern extent of the route. NGET has explained that Norwich Main requires extension works to facilitate several major customer connections, including Hornsea 3, Equinor wind, Norwich GREEN, O&G Solar and Innova battery storage, and that Norwich to Tilbury itself would connect into new bays associated with the wider substation extension. This illustrates that strategic reinforcement and customer connections can be planned and delivered in a coordinated physical space around a major node.

A6.1.4 Potential intensification of cumulative effects

To the extent that the Norwich to Tilbury route passes through or is experienced from the same broader South Norfolk landscape as other renewable energy and electrical projects, it may add to cumulative landscape and visual change, construction activity and the perception of a countryside increasingly occupied by energy infrastructure. This is an in-combination consideration: the overhead line is a separate project, but receptors may experience it alongside solar arrays, BESS compounds, substations, access works and other grid infrastructure.

A6.1.5 Why the significance is limited in this objection

There are three reasons to moderate the weight placed on Norwich to Tilbury here. First, it would be required for strategic network purposes independently of East Pye. Secondly, much of its approximately 180 km route lies well outside the Norwich Main – Great Moulton – Yaxley corridor examined in Objection 6. Thirdly, an overhead transmission reinforcement does not itself demonstrate where future generation or storage projects will locate. Its value is therefore as corroborative context for the scale of energy system change affecting East Anglia, not as evidence that any specific further project will be delivered.

A6.1.6 Examination implication

The Examining Authority should nevertheless ensure that the East Pye cumulative assessment does not treat Norwich to Tilbury, Great Moulton and other major energy infrastructure as unrelated simply because they are separately promoted. The relevant question is whether their combined and sequential effects on shared landscape, transport, amenity and community receptors have been captured at an appropriate spatial and temporal scale.

Sources (checked 17 September 2026): National Grid, Norwich to Tilbury project pages and DCO project update; National Grid/Ofgem material on Norwich Main customer-connection works; NESO TEC Register and Connections Reform guidance.

Objection 7 – Fire and Hazard Safety Risk: Inadequate Independent and “Real-World” Assessment of the East Pye BESS and its Interaction with the Wider Electrical Infrastructure

Context

This objection is about a simple point: the fire and hazard safety of the East Pye Battery Energy Storage System (BESS) should be demonstrated by site-specific evidence available to the Examination, rather than inferred from an outline management plan, future testing, later detailed design or the absence of objection from individual consultees. The Examination should understand the credible consequences of a major event in the actual East Pye configuration before development consent is granted.

A further contextual consideration has become increasingly important. Electrical transmission and storage infrastructure is designed to operate safely and serious failures are uncommon, but the circumstances in which that infrastructure has to operate are not static. Recent hot, dry summers have been accompanied by substantial increases in outdoor fires in England: official statistics for the year ending March 2026 record a 48% increase in outdoor primary fires and a 30% increase in secondary fires compared with the previous year, with the summer increase expressly linked to hot, dry conditions.⁸⁹

That changing external environment matters to a site-specific risk assessment even if no individual item of electrical equipment is regarded as inherently unsafe. Recent wildfire events have required very large deployments of Fire and Rescue Service resources and, in Norfolk in August 2026, simultaneous incidents led NFRS to declare a major incident because operational activity was placing significant pressure on its resources.⁹⁰ The relevant 'real-world' question is therefore not only whether each BESS, transformer, inverter, switchgear or substation component is safe when considered separately, but how those components interact and how the overall safety and emergency-response arrangements remain resilient during the hotter, drier conditions and competing emergency demands that may increasingly form part of the operating context.

What the Examination needs to cover

I respectfully suggest that the Examination should cover:

- the final or bounded battery technology, stored-energy capacity, storage duration, enclosure design and separation parameters that the DCO would permit;
- the extent to which large-scale fire testing, consequence modelling, detailed layout, separation distances and other material safety evidence remain deferred until after consent;
- whether the scoping-out of Major Accidents and Disasters remains justified where material aspects of the eventual BESS technology and consequence assessment are not yet fixed;
- the immediate combined fire and hazard environment formed by the 500 MW BESS, its transformers, inverters and switchgear and the larger southern 400 kV Project Substation;

- whether credible plume, emergency-access, electrical-isolation, outage-management or other operational consequences could extend to the separate NGET/East Pye transmission cluster approximately 450 metres to the north;
- credible propagation, reverse-event, sequential-failure, toxic-emission, explosion, firewater, stranded-energy and emergency-response scenarios, including effects on off-site receptors;
- which parts of the safety case have been or will be independently assessed, by whom, and whether the relevant body has power to require changes before construction or operation;
- whether the DCO Requirements and other controls are sufficiently prescriptive to prevent an unacceptable technology, layout or safety outcome within the Rochdale Envelope; and
- the relevance of the August 2026 Hawkchurch appeal decision to the need for current, technology-specific and site-specific evidence at the point of determination.

Questions to relevant organisations

I would suggest that the following questions should be asked of the relevant organisations so that the Examining Authority can obtain the evidence needed to form a properly evidenced view. They are placed at the start of this objection deliberately: they identify matters on which early, direct answers from the Applicant, NFRS and NGET would assist the Examination as it progresses. A fuller schedule of questions appears at Section 7.9. That later schedule serves a different purpose: it brings together, after the reasoning has been set out, the matters which I consider the ExA should ultimately resolve before reaching its recommendation. Splitting the questions in this way avoids obscuring the immediate requests for evidence within the later detailed analysis, while also avoiding the need for the reader to infer the final examination questions from the body of the objection.

- **Applicant** - What battery technologies, energy capacities, storage durations, enclosure arrangements and separation distances could lawfully be delivered within the DCO envelope, and what material safety evidence remains to be produced after consent?
- **Applicant** - What current large-scale fire testing and site-specific consequence modelling demonstrates the consequences of heat flux, explosion or deflagration, toxic plume, prolonged fire, re-ignition and credible failure of assumed containment measures?
- **Applicant** - Where is the combined fire and hazard interaction between the BESS, transformers, inverters, switchgear and the immediately adjoining larger southern 400 kV Project Substation assessed as a single real-world hazard environment?
- **Applicant** - What evidence demonstrates that the conclusion to scope out Major Accidents and Disasters remains robust notwithstanding the matters still deferred to detailed design and later testing?
- **NFRS** - What material has Norfolk Fire and Rescue Service reviewed, against which current NFCC guidance, and does its advice extend beyond operational access to

explosion, toxic plume, water supply, contaminated runoff, exclusion zones and consequences for identified receptors?

- **NGET** - Has National Grid Electricity Transmission formally assessed the two-cluster configuration and any relevant fire-protection, emergency-access, electrical-isolation, outage-management or other operational consequences across the approximately 450-metre separation?
- **Applicant, NFRS and NGET** - Who controls electrical isolation and emergency command where BESS, Project Substation and NGET assets interact, and how would safe responder access and withdrawal be managed while stranded or energised equipment remains present?
- **Applicant** - Which elements of the final fire and hazard safety case will be independently validated, by whom, and what DCO control prevents construction or operation if testing or modelling identifies an unacceptable result?
- **Applicant** - How have all residential, employment, highway, public-right-of-way, equine, agricultural and ecological receptors been identified and assessed for credible heat, blast, projectile, smoke, toxic-gas, visibility, closure and contaminated-runoff effects?

Formal Objection 7

I object to the East Pye Solar DCO insofar as the fire and hazard safety implications of the proposed BESS have not yet been demonstrated with sufficient certainty, independence and site-specificity to establish that the authorised development can be constructed and operated acceptably throughout its lifetime. Material matters remain dependent upon later technology selection, large-scale fire testing, consequence modelling and detailed design; Major Accidents and Disasters have nevertheless been scoped out; and the combined interaction between the BESS, adjoining high-voltage infrastructure, emergency response arrangements and off-site receptors has not yet been shown to have been subject to a comprehensive independent real-world assessment.

Reasoned justification

7.1 Introduction and Context in relation to Other Objections

7.1.1 This objection forms part of a sequence of objections and should be read in that context. Objection 1 addresses the direct landscape, construction and related cumulative harms of East Pye; Objection 2 the prospect of proliferation following creation of the Great Moulton (Long Stratton) 400 kV connection; Objection 3 the potential emergence of a Great Moulton energy hub; Objection 4 the cumulative and in-combination effects of that hub; Objection 5 the resulting industrialisation of the countryside; and Objection 6 the wider Norwich Main–Great Moulton–Yaxley energy corridor. Objection 7 is distinct but connected: it asks whether the BESS and associated high-voltage infrastructure within that wider development pattern have been subject to a sufficiently independent, site-specific and “real-world” fire and hazard assessment.

7.1.2 I object to the East Pye Solar DCO on the grounds that the fire and hazard safety implications of the proposed Battery Energy Storage System (BESS) have not yet been demonstrated with sufficient certainty, independence or site-specificity to enable the

Examining Authority (ExA) to conclude that the development would be acceptably safe throughout its lifetime.

- 7.1.3** This objection does **not** contend that BESS is inherently unsafe, nor does it amount to an objection to BESS or renewable energy infrastructure in principle. Battery storage is an important component of the transition to a low-carbon electricity system. The issue is whether the regulatory and assessment process provides adequate assurance that a very large BESS, in its particular location and infrastructure context, has been subjected to sufficient independent scrutiny of credible fire, explosion, toxic emissions and emergency response scenarios.
- 7.1.4** My detailed briefing note, **“The BESS Laid Plans – What Could Possibly Go Wrong? Systemic Regulatory Gaps in Fire and Hazard Safety Oversight of Grid-Scale Battery Energy Storage Systems”, August 2026**, is submitted separately as **Companion Document 7A and should be read alongside this objection**. The briefing identifies what I consider to be a structural weakness in the existing system: no single body is clearly charged with undertaking a comprehensive independent, site-specific “real-world” fire and hazard assessment of a BESS at the planning stage, leaving substantial reliance upon applicant-led documentation, non-statutory guidance and fragmented regulatory involvement.
- 7.1.5** The briefing was written principally to examine standalone grid-scale BESS development, including the nearby Field Long Stratton proposal (South Norfolk Application 2025/1689 as revised December 2025) as a case study. That distinction should be made explicit.
- 7.1.6** However, the underlying fire and hazard characteristics of grid-scale battery storage do not cease to apply because batteries form part of a wider solar development. BESS is now a feature of many large solar proposals, including East Pye, and the issues examined in Companion Document 7A concerning thermal runaway, fire, explosion, toxic gases, stranded electrical energy, prolonged incidents, re-ignition, firefighting water, emergency access and off site consequences are therefore directly relevant to the BESS component of this DCO. The East Pye Outline Battery Safety Management Plan (OBSMP) itself identifies fire/explosion, chemical, electrical, stored/stranded-energy and physical hazards.
- 7.1.7** Indeed, East Pye raises an additional issue which is less prominent in a conventional standalone BESS proposal, but the spatial relationship should be stated accurately. The Great Moulton Electrical Transmission Complex is better understood as two related clusters rather than one tightly packed node. The northern transmission cluster comprises one 400 kV National Grid Substation with an East Pye 400 kV Project Substation immediately to its east. Approximately 450 metres to the south, the proposed 500 MW BESS of presently unknown storage duration forms a separate southern cluster with a second, larger East Pye 400 kV Project Substation immediately to its south. This corrected arrangement reduces the force of any suggestion that all of the infrastructure forms a single tightly packed hazard node. It does not, however, remove the need to assess the BESS with its immediately adjoining southern Project Substation, or to establish whether any credible plume, emergency-access, isolation or

operational consequences could extend to the connected northern transmission cluster.

7.1.8 This report first identifies the nature of the risk and the extent to which material safety evidence remains deferred; it then considers the regulatory gap, the combined infrastructure complex, cumulative and sequential risk, and the need for direct evidence from NGET and NFRS. The short questions at the start are intended to secure that direct evidence at an early stage. Section 7.9 then consolidates the wider matters which, in my view, the Examination should resolve before the BESS element can safely be treated as acceptable.

7.1.9 It also cross-refers to the August 2026 Hawkchurch appeal dismissal⁹¹, again not as evidence that BESS is inherently unsafe, but as a recent example of an Inspector requiring current, technology-specific and site-specific evidence before unacceptable fire and explosion risk could be ruled out.

7.2 The Nature of BESS Fire and Hazard Risk and Deferred Safety Evidence

The inherent nature of BESS risk

7.2.1 Grid-scale BESS presents a distinctively low probability but potentially high-consequence hazard profile. As explained in Companion Document 7A, thermal runaway can result in intense and difficult-to-control fires, explosion and toxic gas release; incidents may continue for hours or days and can involve subsequent re-ignition.

7.2.2 The consequences therefore need to be considered not simply by reference to the probability of an initiating event but by reference to severity, duration and geographical extent, particularly where consequences could extend beyond the immediate battery compound. This is consistent with Hawkchurch: there, the Inspector accepted that annual and lifetime incident likelihoods were low but still found that a residual risk over a 40 year operational life required proper consequence assessment⁹².

7.2.3 My concern is not that the East Pye DCO has ignored battery safety: it plainly has not. The Applicant has produced an extensive OBSMP and proposes further testing, consequence modelling, detailed design and consultation. The concern is different: how much remains to be demonstrated after consent, who independently determines whether the resulting evidence is satisfactory, and whether the Examination has before it sufficient information to comprehend the credible consequences of a major event before the DCO is granted.

Reliance upon later detailed design

7.2.4 This is of critical importance, because important elements of the East Pye BESS remain subject to detailed design, with the ultimate battery chemistry and design features remaining to be determined. The final layout will incorporate separation between groups of battery enclosures, inverters and transformers, while the separation of inverters and transformers is itself to be optimised at detailed-design stage to minimise the spread of fire between components.

- 7.2.5** The Applicant also proposes that the selected battery system will subsequently undergo large-scale fire testing and site specific consequence modelling, with an independent Fire Protection Engineer validating relevant testing and modelling. The Outline BSMP states that this evidence will provide the basis for the final BESS installation plans at detailed design stage.
- 7.2.6** On the face of it, these measures appear reassuring. However, Hawkchurch demonstrates why the eventual evidence must concern the actual technology and configuration proposed. There, a named LFP⁹³ system, heat-flux modelling and large-scale fire test material did not resolve the issue because important adverse conditions had not been reproduced and reliance was also placed on testing of a successor product whose safety comparability was as yet uncertain⁹⁴.
- 7.2.7** Whilst the Applicant's commitments to future actions are welcome, they are also evidence that material safety information has not yet been fixed. The ExA should therefore establish whether the DCO's controls are sufficiently prescriptive to guarantee an acceptable outcome irrespective of the eventual technology, layout and detailed design, rather than relying upon assumptions that will only be tested after development consent.
- 7.2.8** The Hawkchurch decision also concluded that a later Emergency Response Plan or Battery Safety Management Plan can add operational detail, but cannot cure a consented layout whose cabinet specification, separation distances, string arrangement, access or containment are themselves inadequately demonstrated.⁹⁵

Major Accidents and Disasters have nevertheless been scoped out

- 7.2.9** This issue assumes particular significance because the Environmental Statement treats Major Accidents and Disasters as scoped out. ES Chapter 18 expressly states that the topic does not warrant a full environmental chapter and adopts a high-level assessment on the basis that significant effects are not anticipated.
- 7.2.10** I recognise that the Planning Inspectorate agreed at scoping stage that Major Accidents and Disasters could be scoped out on the basis of the information then presented, while specifically expecting fire risk associated with the battery storage facilities and relevant firefighting and containment measures to be addressed within the OBSMP. That scoping decision should not, however, be treated as a determination that the eventual BESS design has been demonstrated to be safe. The purpose of Examination is precisely to examine the subsequently submitted application and evidence.
- 7.2.11** There is therefore a potentially important tension which I feel the ExA should resolve. On the one hand, the ES concludes that Major Accidents and Disasters can be scoped out and that no likely significant adverse effects would arise; on the other, the OBSMP recognises that final technology selection, large-scale fire testing, site specific consequence modelling and important elements of separation and detailed design remain outstanding.
- 7.2.12** The Examination should establish that the conclusion has not effectively preceded the evidence upon which that conclusion ultimately depends.

7.2.13 The Hawkchurch reasoning is therefore relevant to the apparent sequence of decision making at East Pye. It indicates that the decision maker should be positively satisfied - on evidence available at determination - that the technology and layout follow current best practice and would not give rise to unacceptable risk. Consultation, national need and the prospect of later controls do not replace that evidential judgment.⁹⁶

7.3 The regulatory issue raised in Companion Document 7A

7.3.1 Companion Document 7A explains why reliance upon normal consultation arrangements alone should not be regarded as equivalent to an independent safety determination. It identifies concerns arising from:

- the absence of a single clearly defined body responsible for comprehensive independent BESS fire/hazard assessment;
- dependence upon developer produced safety material;
- the predominantly guidance based rather than bespoke statutory nature of the BESS safety regime;
- the limited role of specialist regulators at the planning stage;
- the danger that an absence of objection from a consultee may be interpreted as a positive finding of overall safety when that may not have been within the scope of the consultee's assessment; and
- the absence of a consistent requirement for a site specific, receptor- and consequence-based “real-world” assessment.

7.3.2 The purpose of raising this is not to criticise the Applicant, NFRS, HSE or any individual regulatory organisation. Companion Document 7A argues instead that each agency operates within the responsibilities it has been given, and that the potential weakness lies in the architecture of the system itself.

7.3.3 Nor should this objection invite the ExA to substitute itself for a specialist fire engineer or safety regulator. Companion Document 7A expressly recognises that Planning Inspectors can consider fire and safety as material planning issues but are not specialist fire regulators and should not be expected to cure shortcomings in the underlying technical evidence.

7.3.4 The appropriate response is therefore for the ExA to require sufficiently robust evidence from suitably qualified and - where necessary - independent specialists before reaching its conclusions.

7.4 East Pye presents a particular two-cluster electrical-infrastructure safety issue

7.4.1 There is a material distinction between assessing an individual battery enclosure and assessing the BESS within the electrical infrastructure configuration actually proposed at East Pye. The Great Moulton Electrical Transmission Complex is better understood as two related clusters. The northern transmission cluster comprises one 400 kV National Grid Substation and, immediately to its east, an East Pye 400 kV Project Substation. Approximately 450 metres to the south, the proposed 500 MW BESS of presently unknown storage duration forms a separate southern cluster with a second, larger East

Pye 400 kV Project Substation immediately to its south. The new information therefore reduces the force of any suggestion that all of this infrastructure forms one tightly packed hazard node. It does not reduce the need for a combined assessment of the immediately adjoining southern BESS/Project Substation cluster, nor does it justify assuming without evidence that the connected northern transmission cluster is irrelevant to emergency, isolation, plume or operational scenarios.

7.4.2 The East Pye OBSMP recognises interaction within the BESS installation to an extent. It states that groups of battery enclosures, inverters and transformers will be separated to limit uncontrolled fire; identifies explosion exclusion and evacuation distances; and requires separation between BESS equipment and other key structures and infrastructure. On the corrected layout, the immediately adjoining larger southern 400 kV Project Substation is plainly the primary external electrical-infrastructure interface for the BESS. The NGET substation and northern East Pye Project Substation should instead be treated as a second, connected transmission cluster approximately 450 metres away, requiring proportionate assessment of any credible consequential or operational pathways rather than an assumption of direct physical exposure.

7.4.3 However, the ExA should establish whether the assessment moves beyond preventing battery-to-battery propagation and properly considers credible interacting and sequential events within the southern BESS/Project Substation cluster. That should include both directions of causation: a BESS event affecting transformers or HV infrastructure, and an electrical-infrastructure event affecting the BESS. Separately, and without assuming that 450 metres either creates or removes risk, the ExA should establish whether credible modelling and operational evidence demonstrates whether fire, explosion, toxic-plume, emergency-access, isolation or network-operational consequences could extend to the northern transmission cluster. The following sequence is illustrative:



Figure 7.1: Potential escalation from a BESS fire into adjacent equipment, project HV infrastructure and wider operational consequences.

7.4.4 Although that sequence is illustrative rather than a prediction that such escalation would occur, the question for Examination is whether credible interactions have been tested and excluded or mitigated by evidence, rather than merely assumed not to occur.

7.4.5 This is reinforced by the Applicant's own OBSMP. It acknowledges that transformers, inverters and switchgear carry their own fire risks but then states that because those

risks are better understood and regulated, only the battery component of the BESS is addressed in the Outline BSMP.

7.4.6 This raises an obvious Examination question:

Where, and by whom, is the combined fire and hazard interaction between the battery component, its transformers/inverters/switchgear and the immediately adjoining larger southern 400 kV Project Substation assessed as a single real-world hazard environment; and, as a separate question, has the approximately 450-metre separation from the northern NGET/Project Substation cluster been tested against credible plume, emergency-access, isolation and operational consequence pathways?

7.4.7 That appears to me to be one of the most important questions arising from this objection.

7.5 Cumulative and sequential risk

7.5.1 Companion Document 7A specifically identifies cumulative and sequential risk as one of the differences between a genuinely real-world assessment and a narrowly battery-focused assessment: the former considers interaction with nearby developments and infrastructure whereas the latter can tend to assess the scheme in isolation.

7.5.2 The putative risk assessment matrix included in Companion Document 7A identifies an adjacent grid or project substation and location within an existing or emerging energy hub as matters warranting additional scrutiny. At East Pye, that consideration applies most directly to the second, larger 400 kV Project Substation immediately south of the BESS. The NGET substation and the northern East Pye Project Substation are approximately 450 metres away and should be treated as nearby connected infrastructure rather than as immediately adjacent to the BESS. The matrix is not suggested as established professional guidance; it is an illustrative tool. Its underlying principle remains straightforward: actual separation, location and adjoining infrastructure are relevant components of consequence assessment.

7.5.3 This has particular resonance with East Pye, although the point should not be overstated. The BESS should not be viewed simply as another element of a solar farm, but neither should the Great Moulton Electrical Transmission Complex be described as one tightly packed concentration. It comprises two related clusters about 450 metres apart: a southern BESS/larger Project Substation cluster and a northern NGET/Project Substation transmission cluster. The immediate fire and hazard interface is therefore the southern cluster. Any material interaction with the northern cluster should be established, or ruled out, by credible consequence modelling, emergency-response evidence and operational/isolation evidence rather than inferred merely from electrical connection or proximity.

7.5.4 The ExA should establish whether there has been appropriate consideration of:

- propagation or escalation from BESS equipment towards transformer/HV infrastructure;

- fire originating in transformer or other electrical infrastructure and its consequences for the BESS;
- simultaneous or sequential failures;
- safe electrical isolation arrangements;
- stranded electrical energy after isolation;
- toxic plume and explosion consequences;
- safe Fire and Rescue Service operating distances;
- potential conflict between exclusion zones and emergency access;
- water requirements and containment of contaminated firefighting water;
- implications of an incident for access to or operation of adjoining transmission infrastructure; and
- emergency chain of command arrangements where assets have different owners/operators.

7.5.5 The East Pye OBSMP itself confirms that automatic electrical isolation does not remove all risk: batteries remain charged following isolation and residual risk from energised batteries cannot simply be assumed absent.

7.5.6 Hawkchurch also reinforces the need to connect the assumed fire scenario to the actual receptors and environmental pathways. East Pye should identify residential, employment, recreational, highway, public-right-of-way, equine, agricultural and ecological receptors potentially affected by heat, blast, projectiles, smoke, toxic gases, impaired visibility, emergency closure or contaminated runoff. Firewater containment should be assessed as a consequence of the credible incident and firefighting strategy, including water demand, rainfall allowance, runoff routes, containment capacity, equipment failure and exceedance.⁹⁷

7.6 The need for a genuine “real-world” assessment

7.6.1 Companion Document 7A draws a fundamental distinction between compliance oriented or desktop assessment and “real world” consequence assessment. The latter requires consideration of the actual location, adjoining infrastructure, access, water supply, receptors, evacuation arrangements, wind direction, drainage and emergency-response practicality.

7.6.2 This is particularly important because the consequences of a BESS event may not remain within the physical battery compound. Companion Document 7A identifies toxic emissions, smoke, exclusion zones and potential blast effects as mechanisms through which the functional hazard envelope may extend off-site.

7.6.3 It is therefore insufficient merely to demonstrate that individual battery containers meet a technical standard. The relevant planning question is broader:

What would happen if a credible major event occurred here, with this 500 MW BESS of presently unknown duration, immediately adjoining the larger southern 400 kV Project Substation, and with a separate NGET/Project Substation transmission cluster approximately 450 metres to the north, taking account of the actual access,

water, drainage, receptors, electrical-isolation arrangements and emergency-response conditions that will exist on the ground?

7.6.4 That is the “real-world” question which Companion Document 7A argues should lie at the centre of BESS safety assessment.

7.7 The ExA should seek direct evidence from NGET and NFRS

7.7.1 I consider that the Examination would benefit from direct evidence from National Grid Electricity Transmission (NGET) and Norfolk Fire and Rescue Service (NFRS) rather than relying solely upon the Applicant's interpretation of their requirements.

7.7.2 In particular, NGET should be asked whether it has undertaken or reviewed any assessment relevant to the interface between the East Pye BESS/Project Substation infrastructure and the proposed National Grid Substation. That evidence should distinguish clearly between the immediate southern BESS/larger Project Substation hazard interface and the northern NGET/East Pye transmission cluster approximately 450 metres away. NGET should explain whether its safety, design and operational requirements impose any relevant separation, fire-protection, emergency-access, electrical-isolation, outage-management or other interface requirements across that two-cluster configuration.

7.7.3 NFRS should similarly be invited to confirm the extent of its assessment. The important distinction is between:

(a) reviewing the Applicant's emergency arrangements and determining whether NFRS could respond to an incident; and

(b) independently determining whether the consequences of credible BESS fire, explosion or toxic-release scenarios are acceptable at this particular location.

7.7.4 Those are not necessarily the same exercise.

7.7.5 Hawkchurch shows why the distinction matters. The Inspector did not accept an applicant's expert interpretation of what the fire and rescue service must have understood or approved and attached considerable importance to the absence of current written advice addressing the specified technology and very close cabinet spacing.

7.7.6 For East Pye, NFRS should therefore confirm directly what it reviewed, against which NFCC guidance, whether it considered the minimum DCO-permitted parameters, and whether its response extends beyond operational access to explosion, plume, water, containment and receptor consequences.⁹⁸

7.8 The ExA should not infer safety merely from compliance or absence of objection

7.8.1 A recurring concern identified in Companion Document 7A is what might be described as procedural reassurance. A BSMP may have been produced, applicable standards may be cited and consultees may raise no objection, yet none of those things

necessarily demonstrates that a comprehensive independent site-specific assessment has taken place.

- 7.8.2** The East Pye Examination provides an opportunity to avoid precisely that problem. The appropriate test should not simply be:

“Has a Battery Safety Management Plan been submitted and have relevant consultees been consulted?”

- 7.8.3** It should be:

“Has the evidence before the Examination demonstrated, to an appropriate level of confidence, that credible fire and hazard scenarios associated with the BESS - including interaction with the surrounding electrical infrastructure - can be prevented, contained and managed without unacceptable consequences to people, property, the environment or adjoining infrastructure throughout the lifetime of the development?”

- 7.8.4** The Hawkchurch determination of the planning balance is also material. Whilst the Inspector gave substantial weight to national need and the benefits of battery storage she also gave very considerable adverse weight to the unresolved fire-safety issue. The considerable benefits were not able to overcome the inability to demonstrate compliance with current best practice and to rule out unacceptable risk, so taking these factors into account the Inspector dismissed the appeal.

- 7.8.5** The implication for East Pye is not of course that the same outcome is predetermined, but that national need cannot be used as a substitute for a complete and reliable safety case.⁹⁹

7.9 Questions for Examination

- 7.9.1** The questions at the start of this objection are directed principally to obtaining evidence from identified organisations. The following schedule is deliberately broader. It draws together the matters arising from the reasoning above which I respectfully ask the ExA itself to resolve before reaching its recommendation. This two-stage structure is intended to distinguish requests for evidence from the ultimate questions for examination, while keeping both readily accessible.

- 7.9.2** I respectfully ask that the ExA does not treat BESS fire and hazard safety as a matter already resolved merely because an OBSMP has been submitted or because Major Accidents and Disasters were previously scoped out. Instead, as set out overleaf, the ExA should establish the following matters before reaching its recommendation:

Matter requiring examination	Question for the Examination
Final BESS technology	What parameters constrain battery chemistry, enclosure design, stored-energy capacity, storage duration and fire characteristics for the 500 MW BESS, and could a materially different technology ultimately be installed?
Large-scale fire testing (LSFT)	What LSFT evidence presently exists and what material safety evidence is deferred until detailed design?
Consequence modelling	Does modelling cover heat flux, explosion/deflagration, toxic plume, fire duration and credible worst-case off-site consequences and if so can such evidence be presented to the Examination?
Propagation	Does the assessment consider propagation beyond a single enclosure and credible failures of assumed containment?
Transformers/inverters	Has the combined BESS/transformer/inverter fire environment been assessed rather than treating batteries separately from conventional electrical equipment?
400 kV Project Substations	Has the immediate fire and hazard interface between the 500 MW BESS, its transformers/inverters/switchgear and the larger 400 kV Project Substation immediately to its south been assessed as one combined southern hazard environment?
National Grid Substation	Has NGET formally considered the two-cluster configuration and identified any fire-protection, plume, emergency-access, electrical-isolation, outage-management or other operational consequence that could remain relevant across the approximately 450-metre separation?
Reverse-event scenarios	Has a transformer or HV equipment fire affecting the BESS been considered as well as a BESS fire affecting electrical infrastructure?
Emergency response	Can NFRS safely access, operate and withdraw in the presence of a BESS incident and energised/stranded HV equipment?
Electrical isolation	Who controls isolation of the BESS, Project Substations and NGET assets, and how are interfaces managed during an emergency?
Water	Is sufficient firefighting/boundary-cooling water available and can contaminated runoff be contained under credible major-event conditions?
Explosion/exclusion zones	Have exclusion zones been tested against adjoining infrastructure, access routes and responder operating positions?
Toxic emissions	Have realistic plume consequences, including appropriate meteorological scenarios, been assessed?
Independent scrutiny	Precisely which elements of the eventual fire and hazard safety case will be independently assessed, by whom, and with what power to require changes?
DCO controls	Are Requirements sufficiently prescriptive to prevent construction or operation unless all outstanding testing, modelling and safety evidence demonstrates an acceptable result?
Cumulative/sequential risk	Has the BESS been assessed within the corrected two-cluster configuration, with the southern BESS/larger Project Substation treated as the immediate hazard environment and the northern NGET/Project Substation cluster approximately 450 metres away assessed separately for credible consequential or operational effects?

Matter requiring examination	Question for the Examination
Hawkchurch comparator	What aspects of the Hawkchurch Inspector's reasoning are agreed to be relevant to East Pye, and what evidence demonstrates that the uncertainties identified there do not arise under the East Pye DCO envelope?
Test equivalence	Does every relied-upon fire test reproduce, or conservatively bind, the actual battery product, state of charge, loading, spacing, barriers, ventilation, suppression, deflagration arrangements and adjacent-unit configuration that the DCO would permit?
Sensitive receptors	Have all residential, employment, highway, public-right-of-way, equine, agricultural and ecological receptors been identified and assessed for heat, blast, projectiles, smoke, toxic gases, impaired visibility, emergency closure and contaminated runoff?
Operational lifetime and replacement	How will commissioning defects, ageing, maintenance, software or cyber risk, battery replacement and later technology substitution remain within the assessed safety case throughout the authorised operational life?

7.10 Conclusion

7.10.1 I do not invite the ExA to conclude at this stage that the East Pye BESS is unsafe. The evidence does not justify such a categorical conclusion and that is not my objection.

7.10.2 Rather, my objection is that safety must be demonstrated rather than presumed, particularly where material matters remain dependent upon later technology selection, large-scale testing, consequence modelling and detailed design.

7.10.3 The regulatory concerns set out in Companion Document 7A make this particularly important. My briefing was principally prepared in response to standalone grid-scale BESS development, but its central proposition applies equally where BESS forms one component of a solar NSIP: the physical hazards associated with battery storage are not altered by its planning label, while incorporation within a wider energy development may indeed introduce additional interfaces and cumulative/sequential hazards that require assessment.

7.10.4 East Pye presents such a case, but the corrected layout is less concentrated than previously identified. The Great Moulton Electrical Transmission Complex comprises two related clusters: the northern 400 kV National Grid Substation with an East Pye 400 kV Project Substation immediately to its east, and approximately 450 metres to the south, the proposed 500 MW BESS of presently unknown duration with a second, larger East Pye 400 kV Project Substation immediately to its south. The principal immediate fire and hazard interface is therefore within the southern cluster. The Applicant's own OBSMP recognises that separation, LSFT and site-specific consequence modelling are important but proposes that some of these matters will only be finally determined at detailed-design stage. At the same time, the ES has scoped Major Accidents and Disasters out of detailed assessment.

7.10.5 The ExA should satisfy itself that the gap between those two positions has been satisfactorily closed. Hawkchurch provides a practical warning against treating low

probability, applicant testing, outline management plans, consultation or national need as individually or collectively sufficient where material uncertainty remains about the authorised technology, layout and consequences.¹⁰⁰

7.11 Request to the Examination Authority

7.11.1 Accordingly, I ask the ExA to require a comprehensive, site-specific and appropriately independently validated fire and hazard safety assessment before concluding that the BESS element of East Pye is acceptable.

7.11.2 That assessment should address not only individual battery-container safety but credible major-event consequences, off-site receptors and emergency-response practicality. Particular attention should be given to the immediate interaction between the BESS, its transformers and inverters and the larger southern 400 kV Project Substation as one combined southern hazard environment. It should then address the northern NGET/East Pye transmission cluster separately and proportionately, establishing whether any credible plume, emergency-access, electrical-isolation, outage or other operational consequence could extend across the approximately 450-metre separation.

7.11.3 Unless and until those matters have been satisfactorily demonstrated, limited weight should be placed upon general assurances of BESS safety, compliance with guidance or the absence of objection from individual consultees, and the ExA should not conclude that the fire and hazard safety implications of this component of the Scheme have been adequately resolved.

Companion Document 7A: *The BESS Laid Plans – What Could Possibly Go Wrong? Systemic Regulatory Gaps in Fire and Hazard Safety Oversight of Grid-Scale Battery Energy Storage Systems, Rob Shipway, August 2026. Submitted separately and to be read alongside Objection 7.*

References

- ¹ National Grid Electricity Transmission, “Electricity Transmission”; National Grid Electricity Transmission plc, Annual Report and Accounts 2024/25, confirming that its ultimate shareholder is National Grid plc
- ² RIIO (“Revenue = Incentives + Innovation + Outputs”) is Ofgem’s price-control framework for regulating the revenues, investment incentives and performance obligations of monopoly energy-network companies such as NGET
- ³ Ofgem, “Transmission price control 2021 to 2026 (RIIO-T2)”: RIIO-T2 sets the revenue transmission operators may make and the outputs they must provide.
- ⁴ Planning Inspectorate, “Nationally Significant Infrastructure Projects: Pre-Application Advice on Environmental Impact Assessment”, published 27 July 2026, section “The Rochdale Envelope”, paras corresponding to the guidance at lines 319–335: the approach derives from R v Rochdale MBC ex p Milne/Tew; assessment should use a cautious worst case; flexibility must not be abused; and maximum design parameters must be sufficiently defined.
- ⁵ East Pye Solar, ES Volume 1 Chapter 2: EIA Methodology, paras 2.6.1–2.6.5; ES Volume 1 Chapter 4: The Scheme, paras 4.2.20–4.2.24; and Environmental Statement Non-Technical Summary, paras 2.4.1–2.4.3. The Rochdale Envelope is expressly applied to associated development including the BESS compound, 132 kV and 400 kV substations, the new National Grid Substation and Grid Connection Infrastructure.
- ⁶ Planning Inspectorate, Pre-Application Advice on Environmental Impact Assessment (27 July 2026), Rochdale Envelope section: maximum design parameters should be clearly defined and aligned with the draft DCO and associated documents; the flexibility sought must not make the project description too uncertain for proper assessment. East Pye Planning Statement, paras 4.3.2 and 4.4.1, confirms use of maximum parameters and that the National Grid Substation is anticipated to remain permanently as part of the NETS.
- ⁷ Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, regulation 5 and Schedule 4 paragraph 5; Planning Inspectorate, “Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment”, updated 12 August 2026, which treats “other existing and/or approved development” as including reasonably foreseeable projects and plans.
- ⁸ Overarching National Policy Statement for Energy (EN-1), 2025, in force 6 January 2026, paras 4.11.7–4.11.10: the Planning Act 2008 aims to create a holistic planning regime; generating stations and related infrastructure should wherever reasonably possible be brought forward together or in coordinated applications; where separate applications are used, sufficient information must still be provided to comply with the EIA Regulations, including indirect, secondary and cumulative effects and grid connections.
- ⁹ Case C-392/96 Commission v Ireland [1999] ECR I-5901, especially para 76: EIA objectives must not be circumvented by splitting projects and cumulative effects must be taken into account. See also Case C-142/07 Ecologistas en Acción-CODA v Ayuntamiento de Madrid [2008] ECR I-6097 on assessment of connected road works.
- ¹⁰ Case C-392/96 Commission v Ireland [1999] ECR I-5901, especially para 76: EIA objectives must not be circumvented by splitting projects and cumulative effects must be taken into account. See also Case C-142/07 Ecologistas en Acción-CODA v Ayuntamiento de Madrid [2008] ECR I-6097 on assessment of connected road works.
- ¹¹ National Grid, “Bicker Fen Substation Works – Triton Knoll Connection”.
- ¹² Triton Knoll, “Construction – Onshore Substation”.
- ¹³ Planning Inspectorate, Heckington Fen Solar Park, Statement of Need and Planning Statement.
- ¹⁴ West Lindsey District Council, “Solar development proposals for West Lindsey”.
- ¹⁵ National Grid, “Keadby to Cottam and Keadby to West Burton”.
- ¹⁶ West Burton Solar Project, project overview.
- ¹⁷ The West Burton Solar Project Order 2025, SI 2025/116.
- ¹⁸ One Earth Solar Farm, “Proposals”.
- ¹⁹ Planning Inspectorate, One Earth Solar Farm, Grid Connection Statement.
- ²⁰ Clearstone Energy, “Clearstone Energy secures consent for 700 MW of UK battery storage projects”, 11 April 2025.
- ²¹ Planning Inspectorate, Bramford to Twinstead Reinforcement, Need Case, April 2023.
- ²² National Grid, “National Grid connects world’s largest offshore wind farm”.
- ²³ Dogger Bank Wind Farm, “About the project”.

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- ²⁴ Mainstream Renewable Power, “SMart Wind secures grid capacity for second gigawatt from Hornsea offshore wind zone”, 11 November 2011.
- ²⁵ NESO, Hornsea 1A/1B Connect and Manage Derogation Report.
- ²⁶ Dogger Bank Wind Farm, “About the project”.
- ²⁷ RTE International, “Interaction Studies between Sofia & Dogger Bank C Offshore Wind Farms”.
- ²⁸ National Grid Electricity Transmission plc, Annual Report and Accounts 2024/25.
- ²⁹ Statera Energy, “Sundon Storage”.
- ³⁰ Planning Inspectorate, Rosefield Solar Farm, Grid Connection Statement.
- ³¹ Statera Energy, “East Claydon Storage”.
- ³² Statkraft, “East Claydon Greener Grid Park”.
- ³³ National Energy System Operator, “About Connections Reform”: Gate 2 applies to projects meeting readiness and strategic-alignment requirements and may provide a confirmed connection date, connection point and queue position.
- ³⁴ Planning Inspectorate, “Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment”, published 20 September 2024 and updated 12 August 2026.
- ³⁵ Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, regulation 5 and Schedule 4.
- ³⁶ Planning Inspectorate, “Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment”, updated 12 August 2026. The advice treats other existing and/or approved development as including reasonably foreseeable projects and describes a staged CEA process.
- ³⁷ Planning Inspectorate / applicants, Joint Report on Interrelationships between NSIPs (Gate Burton, Cottam, West Burton and Tillbridge); West Burton Solar Project Recommendation Report, cumulative effects section. The joint report was required by the ExAs and updated as the neighbouring schemes progressed.
- ³⁸ Green Hill Solar Farm, Environmental Statement Chapter 25: Cumulative Effects and Effects Interaction, May 2025; EIA Scoping Report appendices, cumulative landscape and visual methodology.
- ³⁹ The Drovers Solar Farm, Environmental Statement Non-Technical Summary and EIA Scoping Report, cumulative effects and High Grove coordination.
- ⁴⁰ Lime Down Solar Park, Environmental Statement Chapter 8: Landscape and Visual, section 8.13 Cumulative Effects Assessment; project information confirms connection to the existing Melksham Substation.
- ⁴¹ Light Valley Solar, Environmental Statement Chapter 4: Approach to EIA, section 4.10; Appendix 17.1 Long List of Cumulative Developments, February 2026.
- ⁴² Sunnica Energy Farm, Statement of Common Ground with Natural England (cumulative assessment methodology) and grid-connection material confirming connection to the existing Burwell National Grid Substation.
- ⁴³ Mallard Pass Solar Farm, Examination submission responding to local-authority concerns and updating the cumulative long list to include additional solar NSIPs; Explanatory Memorandum confirming grid connection to the National Grid Ryhall Substation.
- ⁴⁴ Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, Schedule 4 paragraph 5 (direct, indirect, secondary and cumulative effects); Planning Inspectorate, current Cumulative Effects Assessment advice; see also former Advice Note Seven annex on related/consequential development.
- ⁴⁵ East Pye Solar, Environmental Statement Non-Technical Summary, paras 5.1.3-5.1.4: Norwich Main was rejected for insufficient capacity/expansion opportunity; National Grid identified capacity on the Bramford-Norwich 400 kV line and the need for a new National Grid Substation, with the Great Moulton location selected.
- ⁴⁶ East Pye Solar, Scheme Overview: the new National Grid Substation will be retained because it will form part of the transmission network.
- ⁴⁷ Tasway Energy Park, Project Update December 2025 and FAQs: Tasway received a Gate 1 offer; its planning submission is delayed pending better visibility of a grid connection point; the promoter also identifies East Pye, Long Stratton BESS and Wacton Road BESS as nearby schemes with which it is considering cumulative impacts and collaborative benefits.
- ⁴⁸ EIR request to NGET V3, 10 August 2026, sections 1–4 and 7–9. Response awaited at the date of this version.
- ⁴⁹ Planning Inspectorate / applicants, Joint Report on Interrelationships between NSIPs (Gate Burton, Cottam, West Burton and Tillbridge), including later cumulative review material.
- ⁵⁰ West Burton Solar Project Recommendation Report, cumulative effects section; Joint Report on Interrelationships and later technical note on additional schemes.
- ⁵¹ Green Hill Solar Farm, Environmental Statement Chapter 25: Cumulative Effects and Effects Interaction, May 2025.
- ⁵² The Drovers Solar Farm, Environmental Statement Non-Technical Summary, cumulative effects section; EIA Scoping Report, including coordination with adjacent High Grove Solar.
- ⁵³ Lime Down Solar Park, Environmental Statement Chapter 8: Landscape and Visual, section 8.13; project information on connection to Melksham.

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- ⁵⁴ Light Valley Solar, Environmental Statement Chapter 4: Approach to EIA and Appendix 17.1 Long List of Cumulative Developments, February 2026.
- ⁵⁵ Sunnica Energy Farm, Statement of Common Ground with Natural England (cumulative assessment methodology) and grid-connection material.
- ⁵⁶ Mallard Pass Solar Farm, Deadline 5 submission updating cumulative long list following local-authority concerns; Explanatory Memorandum confirming connection to Ryhall.
- ⁵⁷ Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, requirements concerning likely significant effects including cumulative effects.
- ⁵⁸ Overarching National Policy Statement for Energy (EN-1), cumulative effects and environmental assessment provisions.
- ⁵⁹ National Policy Statement for Renewable Energy Infrastructure (EN-3), solar landscape and visual assessment and cumulative effects provisions.
- ⁶⁰ National Policy Statement for Electricity Networks Infrastructure (EN-5), landscape and visual effects of electricity network infrastructure.
- ⁶¹ Planning Inspectorate, Advice on Cumulative Effects Assessment: staged identification, screening, information gathering and assessment of other development.
- ⁶² Natural England, National Character Area 83: South Norfolk and High Suffolk Claylands, profile, context map and key characteristics.
- ⁶³ South Norfolk Landscape Character Assessment, including E2 Great Moulton Plateau Farmland, B1 Tas Tributary Farmland and B4 Waveney Tributary Farmland.
- ⁶⁴ South Norfolk Council, Landscape Susceptibility in relation to Energy Generation, Storage and Transmission Supplementary Planning Document, adopted 18 February 2026.
- ⁶⁵ South Norfolk Landscape Character Assessment, E2 Great Moulton Plateau Farmland: flat elevated plateau, extensive large-scale arable fields, openness and exposure, sparse hedgerows and disused-airfield legacy.
- ⁶⁶ South Norfolk Landscape Character Assessment, B1 Tas Tributary Farmland: gently undulating or sloping arable landscape, shallow tributary valleys, large open fields, small woodland blocks, wooded horizons and dispersed settlement.
- ⁶⁷ South Norfolk Landscape Character Assessment, B4 Waveney Tributary Farmland: transitional plateau-to-valley landscape, larger fields and openness on higher ground, smaller fields and greater enclosure around tributaries, woodland and more frequent settlement.
- ⁶⁸ Norfolk Gliding Club, History of Tibenham Airfield and current operating information: former USAAF Station 124, three-runway wartime airfield, now active gliding and general-aviation use.
- ⁶⁹ 93rd Bomb Group Museum / Airfields of Britain Conservation Trust, Hardwick Airfield: former USAAF Station 104, substantial wartime runway and infrastructure complex, now principally agriculture with residual/limited aviation and heritage use.
- ⁷⁰ Old Buckenham Aerodrome, official website: former USAAF 453rd Bombardment Group airfield, now an active licensed general-aviation aerodrome west of Carleton Rode.
- ⁷¹ Department for Energy Security and Net Zero, Clean Power 2030 Action Plan (13 December 2024; updated 15 April 2025): accelerated clean-power delivery and the observation that most large-scale onshore renewable and battery projects required for the 2030 objective would likely need consent by around 2028.
- ⁷² National Energy System Operator, Connections Reform Timeline (13 February 2026 update): phased Gate 2 connection offers through 2026 and into 2027.
- ⁷³ Ofgem, agreement on the timetable for Gate 2 to Whole Queue connection offers (3 June 2026), with a further Phase 1 extension published 2 October 2026.
- ⁷⁴ Cross-reference: Objection 1 – Significant Landscape and Construction Harms Outweighing Need, especially its introductory explanation of the deliberately limited and structured scope of the objection sequence.
- ⁷⁵ Overarching National Policy Statement for Energy (EN-1), 2025, in force 6 January 2026, section 4.7 (good design) and section 5.10 (landscape and visual), especially paragraphs 4.7.1–4.7.2 and 5.10.4–5.10.6.
- ⁷⁶ National Policy Statement for Renewable Energy Infrastructure (EN-3), 2025, in force 6 January 2026, especially paragraphs 2.10.17–2.10.19, 2.10.85–2.10.93 and 2.10.149–2.10.150.
- ⁷⁷ South Norfolk Landscape Assessment, Great Moulton Plateau Farmland (E2), especially paragraphs 17.14–17.16: sensitivities include openness, long views, expansive skies, quiet rural lanes and settlement identity; the strategy seeks to conserve the area’s open and unsettled character.
- ⁷⁸ South Norfolk Council, Landscape Susceptibility SPD, Appendix 3.3: Landscape Susceptibility Analysis – Battery Storage, November 2025, Landscape Type B: Tributary Farmland; and Appendix 4: Local Landscape Character Analysis, Tas Tributary Farmland.
- ⁷⁹ East Pye Solar, Environmental Statement Volume 1, Chapter 18: Other Environmental Matters, APP/6.1.18, paragraph 18.6.111, recognising landscape character and visual amenity as determinants influencing mental wellbeing, sense of place, recreation and connection to nature.
- ⁸⁰ The expression itself was deployed in evidence before the Mallard Pass Examination, while Sunnica representations used closely related descriptions such as a “quasi-industrial landscape”. See Mallard Pass Solar Farm, Mallard Pass Action Group, Written Representations 3, Appendix 1: Landscape and Visual Review, May 2023, paras 6.18–6.20; and Sunnica Energy Farm, Secretary of State Decision Letter, 12 July 2024, para 4.125.

⁸¹ Sunnica Energy Farm, Secretary of State Decision Letter, 12 July 2024, paras 4.125–4.127, summarising Relevant Representations and the host authorities’ case on scale, transformation of landscape, sense of place and place attachment.

⁸² Sunnica Energy Farm, Secretary of State Decision Letter, 12 July 2024, paras 4.140–4.147, reporting the ExA’s conclusions on material harm to landscape character and visual amenity, increased enclosure, residents’ perception of their surroundings and the change from a rural/agricultural to an energy-production landscape.

⁸³ Sunnica Energy Farm, Secretary of State Decision Letter, 12 July 2024, paras 4.153–4.160 and 9.1–9.2. The Secretary of State rejected the ExA’s recommendation to withhold consent, concluding overall that the benefits outweighed the adverse impacts.

⁸⁴ Mallard Pass Solar Farm, Examining Authority Report to the Secretary of State, 16 February 2024, paras 3.6.58–3.6.69 and 3.9.53–3.9.59. The ExA distinguished landscape character from visibility, considered how landscape is perceived and experienced, identified the change from arable farmland to solar development and the “industrial like character” of the proposed substation, and recorded concerns over a corridor effect along public rights of way.

⁸⁵ Mallard Pass Solar Farm, Secretary of State Decision Letter, 12 July 2024, paras 4.37–4.46 and 7.8. The Secretary of State agreed that there would be considerable change to existing landscape character and visual amenity and assigned those harms moderate negative weight in the planning balance, while granting development consent overall.

⁸⁶ East Pye Solar, statutory section 56 notice/covering letter dated 29 April 2026 and Environmental Statement Volume 1, Chapter 4: The Scheme, APP/6.1.4, describing the approximately 1,212.3 hectare Order limits and principal scheme components.

⁸⁷ East Pye Solar, Environmental Statement Volume 3, Appendix 7.2: Landscape Baseline, APP/6.3.7.2; and Environmental Statement Volume 1, Chapter 7: Landscape and Visual, APP/6.1.7, including the description of landscape character, tranquility and recreational access.

⁸⁸ National Policy Statement for Energy – Update 2025: Appraisal of Sustainability Main Report, landscape/townscape and social objectives, including protection of landscape character and local distinctiveness, tranquility, placemaking and sense of place.

⁸⁹ Ministry of Housing, Communities and Local Government, Fire and rescue incident statistics, year ending March 2026, published 22 July 2026. The statistics record 6,924 outdoor primary fires, 48% more than in the previous year, and 102,549 secondary fires, 30% more; the summer spike was attributed to hot, dry conditions similar to summer 2022.

⁹⁰ BBC News, “How are firefighters coping with wildfires?”, 12 August 2026, reporting that emergency services had been stretched by several large fires during continued hot and dry weather, including more than 120 firefighters and 26 fire engines at the New Forest fire at its peak; BBC News, “Firefighters know sunny days will be relentless”, 14 August 2026, reporting that Norfolk Fire and Rescue Service declared a major incident because simultaneous incidents were placing significant pressure on resources, and that crews had been mobilised 2,730 times in July 2026, 768 more than in July 2025.

⁹¹ Hawkchurch Appeal Dismissal – Fire and Safety Implications for East Pye, paras 1–3 and 26; Planning Inspectorate, Appeal Decision APP/U1105/W/25/3369854, Land Just South of Hazelhurst, Raymonds Hill, Axminster (Hereinafter known as the ‘Hawkchurch’ appeal’ August 2026, paras 60–65, 91 and 101–103.

⁹² Hawkchurch appeal decision, paras 24–27. The Inspector referred to the limited incident-data period, the absence of an industry-endorsed probability methodology, a forty-year operating life and probable battery replacement around year 15

⁹³ **LFP** means **lithium iron phosphate**, a lithium-ion battery chemistry (chemical formula **LiFePO₄**) - commonly used in battery energy storage systems. It is generally regarded as more thermally stable than chemistries such as nickel manganese cobalt (NMC) (which it has largely replaced in BESS) but it is not immune from thermal runaway, fire, explosion or toxic gas hazards

⁹⁴ Hawkchurch appeal decision, paras 16 and 35–40. The Inspector noted that the test did not examine a cabinet damaged at the beginning of the fire and that failure of explosion prevention measures could not be ruled out.

Hawkchurch appeal decision, paras 53–56

⁹⁶ Hawkchurch appeal decision, paras 60–65 and 91–103.

⁹⁷ Hawkchurch appeal decision, paras 57, 63 and 81. The Inspector concluded that the reliability of the pollution-control assessment depended upon the reliability of the fire-safety evidence.

⁹⁸ Hawkchurch appeal decision, paras 31–33, 46–52 and 61–63.

⁹⁹ Hawkchurch appeal decision, paras 91 and 96–102. The Inspector afforded very considerable adverse weight to the unresolved fire-safety issue despite the significant or very significant benefits of energy storage.

¹⁰⁰ Hawkchurch appeal decision, paras 60–65 and 102–103.

COMPANION DOCUMENT 7A

East Pye Solar DCO Examination

Companion to the Written Representation of Rob Shipway

Supporting Objection 7 – BESS Fire and Hazard Safety

The BESS-Laid Plans...What Could Possibly Go Wrong?

Systemic Regulatory Gaps in Fire and Hazard Safety Oversight of Grid-Scale Battery Energy Storage Systems (BESS) prepared by Rob Shipway

August 2026



The BESS Laid Plans – What Could Possibly Go Wrong? Systemic Regulatory Gaps in Fire and Hazard Safety Oversight of Grid-Scale Battery Energy Storage Systems

Status and relationship to the main submission

This document is submitted as Companion Document 7A to my principal Written Representation for the East Pye Solar DCO Examination. It supports Objection 7 – BESS Fire and Hazard Safety, but is provided separately rather than being physically incorporated as an appendix within the main report. This reflects its length and specialist nature.

The main Written Representation contains the objection, the matters which I consider the Examination needs to address, and the questions arising for the Applicant and relevant public bodies. Companion Document 7A provides the wider evidential, regulatory and comparative material underpinning those concerns. The report was originally completed in August 2026 and its substantive content has been retained.

It should therefore be read alongside Objection 7. Its particular relevance to East Pye is that the DCO includes substantial BESS infrastructure in close association with major electrical substations, transformers and high-voltage grid infrastructure. The document is intended to help the Examination test whether safety has been demonstrated in the real-world site context, rather than inferred from procedural compliance or the absence of consultee objection.

Short summary

- The report identifies a structural gap in independent, site-specific BESS fire and hazard safety assessment at the planning stage.
- It examines reliance on developer-led material, the limited statutory role of Fire and Rescue Services, and the absence of a dedicated BESS safety-case regime.
- It considers real-world consequences including sensitive receptors, emergency access, prolonged fire, toxic gas, re-ignition and contaminated fire-water, and compares the Great Britain approach with more codified regimes elsewhere.
- It uses the Field Long Stratton BESS proposal as a case study of how wider regulatory weaknesses may arise in an actual planning context.

Introduction

This report has been prepared from an unusual but, I believe, important perspective. I am a retired Town Planner with approximately 45 years' experience in major site development and infrastructure planning. I also happen to live around 200 metres from a proposed grid-scale Battery Energy Storage System: the Field Long Stratton BESS in South Norfolk. That proposal is considered later in this report as a case study of the fire and hazard safety issues that can arise when large-scale BESS development is proposed close to sensitive receptors.

My interest in this issue did not begin as a general review of national BESS regulation. It began with a local planning application. In examining the Field Long Stratton proposal, I initially focused on the planning, environmental and site-specific issues that would ordinarily arise with a major infrastructure development of this kind. However, the more closely I examined the material, the more apparent it became that the most significant issue was not simply the merits or otherwise of one particular scheme, but the absence of any clear regulatory mechanism for assessing the real-world fire and hazard safety implications of grid-scale BESS.

In that sense, I came to the issue obliquely. What appeared at first to be a local planning concern revealed a much wider structural problem. There appeared to be a substantial regulatory lacuna: a significant area of public safety risk which was recognised in principle, but which no single regulatory body had been clearly tasked with assessing in practice. The Health and Safety Executive, Fire and Rescue Services, Local Planning Authorities and developers all have roles of one kind or another, but none appears to be responsible for undertaking a comprehensive, independent, site-specific assessment of BESS fire and hazard safety at the planning stage.

The more I explored this position, the greater my concerns became. This report therefore seeks to examine not only the Field Long Stratton case study, but the wider regulatory framework within which such proposals are currently assessed. In no sense does it argue against BESS in principle. Battery storage is an essential element of the transition to a low-carbon energy system. The question is whether the system for approving such

development has kept pace with the speed, scale and changing siting characteristics of BESS deployment, particularly where schemes are proposed close to homes, businesses, livestock, constrained rural roads and other sensitive receptors.

The central concern of this report is that the present framework risks giving the illusion of safety assurance without necessarily providing the substance of it. It relies heavily on developer-led documentation, non-statutory guidance, fragmented consultation responses and local planning judgement, rather than a clearly accountable system of independent technical scrutiny. That gap matters, because fire and hazard safety is not an abstract or theoretical matter. It is inherently site-specific, consequence-driven and dependent on the real-world circumstances in which a development is proposed.

I should also add finally that I shared the Final Draft of this report with several people who I thought might wish to make observations on it in early July 2026. Both Ben Burgess (Head of Planning at South Norfolk Council) and [REDACTED] (my South Norfolk District Councillor) made encouraging noises and expressed support for sharing it with a wider audience. I also shared this with Norfolk Fire and Rescue, but have received no acknowledgement of its receipt, or anything by way of feedback.

Executive Summary

- a.** This briefing examines what appears to be a significant gap in the UK's regulatory framework for grid-scale Battery Energy Storage Systems (BESS), with particular reference to how fire and hazard safety risks are assessed through the planning system.
- b.** The report does not argue against BESS in principle. Battery storage is an essential element of the transition to a low-carbon energy system. The issue is whether the safety framework has kept pace with the speed, scale, duration and changing siting characteristics of modern BESS deployment.
- c.** The concern arises from the rapid expansion of BESS over a very short period. What was, only a few years ago, a relatively niche form of energy infrastructure has become a mainstream and spatially widespread development type, with increasingly large schemes coming forward in semi-rural, edge-of-settlement and more populated locations.
- d.** Earlier BESS schemes were more commonly associated with industrial land, existing substations or remote infrastructure locations. Increasingly, however, proposals are being advanced in closer proximity to residential properties, businesses, key services like health and education, public rights of way and constrained rural roads.
- e.** This shift matters because BESS fire and hazard safety is highly context-dependent. A fire event in a remote or industrial setting may be capable of being managed within an established operational environment. The same event close to homes, community assets, businesses or narrow rural lanes may have materially different consequences.
- f.** The principal BESS hazards include thermal runaway, intense and prolonged fire, toxic gas release, explosion risk, re-ignition, contaminated fire-water, exclusion zones and extended emergency response. These risks may be low probability, but their consequences can be severe and may extend beyond the site boundary.
- g.** For that reason, BESS safety cannot sensibly be assessed solely by reference to generic battery design, manufacturer compliance or standardised safety documentation. It requires an assessment of how a credible incident would behave in the specific location, with the actual receptors, access constraints, water supply, evacuation issues and emergency response realities present on the ground.

- h.** The core finding of this report is that no single body is currently responsible for undertaking that comprehensive, independent, site-specific “real world” assessment at the planning stage. Responsibility is fragmented between developers, Local Planning Authorities, Fire and Rescue Services, the Health and Safety Executive and wider national policy.
- i.** The Health and Safety Executive is a specialist safety regulator, but it has not been assigned a defined statutory planning-stage role for ordinary standalone BESS applications. Its absence of objection should therefore not be treated as evidence that BESS fire and hazard risks have been independently assessed and found acceptable.
- j.** Fire and Rescue Services provide important operational expertise, but they are not statutory consultees for BESS planning applications. Their role is advisory, often focused on access, water, emergency response and review of Battery Safety Plans, rather than on determining whether the consequences of a major fire event are acceptable in a particular location.
- k.** Local Planning Authorities remain the decision-makers, but most do not have in-house expertise in lithium-ion battery fire behaviour, thermal runaway, toxic gas dispersion, explosion risk, fire-water contamination or the operational constraints of major BESS incidents. They may therefore be left to make planning decisions on highly technical safety matters without a clear statutory safety arbiter.
- l.** This creates a risk of false reassurance. A developer may submit a Battery Safety Management Plan; HSE may not be engaged; the Fire and Rescue Service may raise no objection; and the LPA may infer that safety has been resolved. In reality, no body may have undertaken the wider, receptor-based assessment needed to understand the actual consequences of a major incident.
- m.** The report compares this position with other energy and infrastructure sectors. Nuclear power, offshore oil and gas, major gas infrastructure, Liquified Natural Gas terminals, and major accident hazard pipelines are subject to more clearly defined safety regimes, statutory oversight, safety-case duties or specialist regulatory involvement.
- n.** Grid-scale BESS occupies an unusual position. It is promoted as essential energy infrastructure, but it does not currently sit within an equivalent bespoke fire and hazard safety regime. Instead, safety is addressed through a combination of general health and safety law, electrical safety duties, planning control, developer-led documentation, NFCC guidance and advisory consultee input.
- o.** The report also compares the UK position with other jurisdictions. In the United States, BESS safety is more commonly anchored in fire-code approval, NFPA 855, the International Fire Code, hazard mitigation analysis, test evidence and approval by the relevant fire authority. In parts

of Australia, formal fire safety studies require detailed consideration of site context, surrounding land uses, sensitive receptors, access, fire-water, plume behaviour and emergency response.

- p.** The European Union has also moved further than Great Britain in recognising stationary BESS safety as a distinct regulatory issue. Regulation (EU) 2023/1542 includes specific provisions for stationary battery energy storage systems, including safety requirements and technical documentation. Under the Windsor Framework, these EU requirements apply in Northern Ireland but not directly in Great Britain.
- q.** This creates a striking internal contrast within the United Kingdom. A more modern battery safety regime applies in Northern Ireland, while England, Scotland and Wales remain dependent on older domestic battery rules, general safety law, planning judgement, developer-led material and non-statutory guidance. That divergence reinforces the conclusion that mainland UK is lagging behind.
- r.** The limitations of existing NFCC guidance are also important. Although NFCC guidance has been updated and is a valuable source of advice, it remains guidance rather than regulation. It does not create a statutory safety-case regime, does not make Fire and Rescue Services formal decision-makers, and does not by itself require independent real-world assessment of every proposal.
- s.** A central theme of the report is the over-reliance on developer-led safety documentation. Battery Safety Management Plans may be detailed and professionally prepared, but they are still applicant-led. The current framework does not consistently require independent validation, systematic testing of assumptions, or verification that all relevant site-specific hazards and receptors have been identified.
- t.** This is particularly problematic where sensitive receptors are nearby. Residential properties, equine establishments, livestock, rural businesses, visiting clients and public rights of way may all be affected by a BESS incident. These receptors cannot be treated as abstract points on a plan; their vulnerability depends on occupation, behaviour, mobility, familiarity with the site, animal welfare issues and evacuation practicality.
- u.** The report uses the Field Long Stratton BESS proposal in South Norfolk as a case study. That proposal is considered because it illustrates how the wider regulatory gap can become acute where a large BESS is proposed close to sensitive receptors, and where there are concerns about access, emergency response and the absence of a comprehensive independent fire and hazard safety assessment.
- v.** The case study is not included merely as a local objection. Its purpose is to demonstrate how national regulatory weaknesses can manifest themselves in a real planning application. It shows how a scheme may proceed through the planning system with detailed applicant

material, but without any single body clearly taking responsibility for assessing the full consequences of a major fire or hazard event in its actual context.

- w.** The report also considers the role of Planning Inspectors. Inspectors can and do consider BESS fire and safety matters where they are raised as material planning issues, but they are not specialist fire regulators and should not be expected to fill in or cure a deficient evidence base. Their conclusions will depend heavily on the quality of evidence before them.
- x.** The wider lesson is that safety should not be inferred from procedural compliance alone. The fact that a developer has produced a safety plan, or that a consultee has not objected, does not necessarily mean that the development has been demonstrated to be safe for its lifetime in its real-world setting.
- y.** The report therefore identifies a need for reform. Possible measures include a defined statutory role for HSE or another competent safety body, clearer requirements for independent validation of BESS safety assessments, updated national guidance (possibly upgraded to formal regulations) reflecting modern siting patterns, and a more explicit requirement for site-specific assessment of sensitive receptors and emergency response practicality. Ideas for a possible BESS Fire & Safety Risk Assessment Matrix (a potential tool for Fire and Rescue Services) are floated.
- z.** The conclusion is that there may be no simple institutional solution, because HSE, Fire and Rescue Services and LPAs have each been placed in difficult and limited roles that are not explicitly defines. However, the present framework is not adequate for the scale and nature of development now coming forward. The UK should not wait for a major incident before creating the guard rails needed to ensure that BESS deployment is not only effective, but demonstrably safe and publicly credible.

1. Purpose

- 1.1 This briefing examines emerging evidence of weaknesses in the UK's regulatory framework for grid-scale Battery Energy Storage Systems (BESS), with particular reference to how fire and safety hazard risks are assessed within the planning system. It identifies a structural regulatory void arising from the absence of a single clearly accountable authority, the reliance on developer-led information, and the increasing divergence between existing guidance and current patterns of deployment.
- 1.2 While the expansion of BESS is a vital component of the transition to a low-carbon energy system, the manner in which these schemes are being assessed for safety raises questions about whether the regulatory framework is adequately equipped to deal with the scale, complexity and evolving siting characteristics of this infrastructure.
- 1.3 These concerns are examined generally but also through an examination of BESS proposals in South Norfolk in East Anglia. Annex A identifies the FRS response to a number of BESS applications in the district, a specific case study of a recently submitted BESS (South Norfolk Council application 2025/1689, as revised December 2025) and potential fire event scenarios relating to this case study, all of which serve only to heighten the concerns that have been identified.
- 1.4 This report is concerned principally with freestanding, grid-scale lithium-ion battery energy storage systems (BESS). However, BESS are also routinely incorporated within large-scale solar developments and the conclusions reached in this report are therefore equally relevant to the BESS components of such schemes. This is particularly important where battery storage is deployed in close association with other substantial electrical infrastructure, including substations, transformers, switchgear and high-voltage connections.
- 1.5 In such circumstances, the overall fire and hazard environment may be more complex than for a standalone BESS, with a greater concentration of electrical equipment, potential ignition sources and interacting infrastructure within a confined area. The presence of associated generation and grid infrastructure should therefore not be regarded as reducing the significance of BESS fire risk; depending upon the particular design, layout and emergency-response arrangements, it may instead increase the need for rigorous, site-specific assessment of credible fire and major-incident scenarios.

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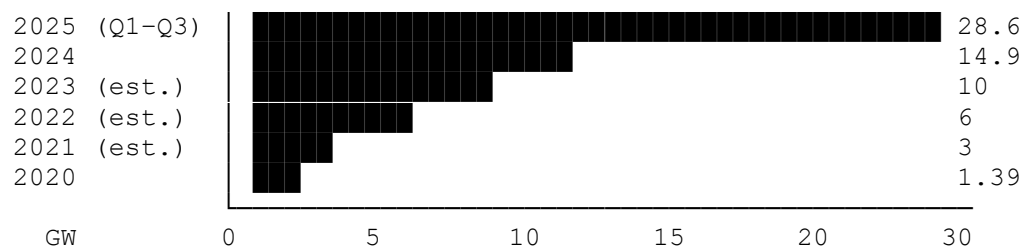
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2. Rapid Expansion of BESS Deployment in the UK

- 2.1 The pace at which grid-scale Battery Energy Storage Systems (BESS) have been deployed in the UK over the past five years has been exceptionally rapid, and this acceleration is central to understanding why existing regulatory arrangements are now under strain. What was, as recently as 2020, seen as a relatively limited and specialist component of the energy system has, within a short period, become a major and expanding class of infrastructure.
- 2.2 In 2020, operational BESS capacity in the UK stood at approximately 1 GW (Gigawatt). At that stage, projects were relatively few in number, modest in scale, and typically associated with established industrial locations or existing grid infrastructure. The technology remained emerging, and its geographic footprint was comparatively limited.
- 2.3 By 2025, this position had changed markedly. Operational capacity increased to approximately 6.5–7 GW, representing a more than fivefold increase in five years, reflecting both larger individual schemes and a substantial increase in the number of projects being brought forward.
- 2.4 The acceleration is particularly evident in recent delivery trends:
- during 2024, capacity additions reached historically high levels, reflecting the maturation of the project pipeline
 - in 2025, annual additions are estimated at around 1.5–2 GW, indicating a further step-change in deployment rates
 - early 2025 delivery rates exceeded those seen in the equivalent period in 2024, suggesting continued acceleration rather than stabilisation.
- 2.5 However, the most striking change lies not only in operational capacity, but in the scale and volume of projects securing planning consent. The number of schemes progressing through the planning system has increased sharply, alongside a substantial rise in the total capacity being approved.

- 2.6 The energy consultancy Cornwall Insights provided an overall summary of BESS approval rollout over recent years¹ showing a striking reflection of the scale of progress. Using its research for the years 2020, 2024 and 2025 it is possible to obtain a clear picture of the rapidly changing picture.

Diagram 1: BESS Planning Approvals (GW) — Great Britain²



- 2.7 What is also notable is that consents for 2025 are for the first 9 months of the year only. Assuming a reasonable extrapolation of these figures over a complete calendar year it is entirely probable that 2025 consents will have amounted to somewhere between 35 – 40GW of grid scale battery capacity approved in the entire year of 2025.
- 2.8 This expansion in both project numbers and approved capacity is highly significant. It reflects a transition from a relatively limited number of strategically located installations to a much more dispersed and intensive pattern of development, with schemes coming forward across a wide range of geographic contexts.

¹ Battery storage drives record year for UK renewables planning approvals - Energy Storage

² Figures for 2021–2023 are indicative estimates derived from the growth trajectory reported by Cornwall Insight (ESS News, 2026) and total renewable approval data. Confirmed figures are available for 2020 (1.39 GW), 2024 (14.9 GW), and 2025 (28.6 GW, Q1–Q3).

2.9 At the same time, the nature of development has evolved. Earlier projects were typically smaller (50MW or less) and closely linked to existing infrastructure. Typical BESS locations were located far from sensitive receptors such as residential properties, community activities and businesses, in sparsely populated upland parts of the UK. More recent projects have been:

- larger (100MW+) and increasingly configured as standalone grid-scale developments
- more widely distributed across more densely populated areas of lowland Britain, in landscapes that can be regarded as semi-rural or even suburban
- more frequently located in proximity to residential and mixed-use environments
- increasingly configured as Long Duration Energy Storage (LDES)³, rather than conventional short-duration BESS. Such schemes remain novel and largely untested at very large scale in semi-rural or relatively populated locations, particularly close to sensitive receptors, reinforcing the need for greater scrutiny of fire duration, stored energy, emergency response and off-site consequences

2.10 The combined effect of these trends is that BESS have transitioned, within a very short period, from a relatively niche technology in 2020 to a rapidly expanding infrastructure class by 2024 and now - in 2026 and going forward - a mainstream and spatially widespread form of development characterised by both increasing scale and a sharp rise in the number of individual sites. At same time, given that the broader development pipeline continues to expand beyond these already high levels of approval, current growth is unlikely to represent a peak.

2.11 It is something of an inevitability that this rapid increase in both the number of consents and the volume of capacity approved will give rise to questions of the fitness of the safety regulatory framework, given the system is now required to process a growing number of technically demanding proposals. Has the speed and scale of this expansion outpaced the evolution of the regulatory framework?

³ Short-duration BESS primarily provides rapid, relatively brief grid balancing, whereas long-duration energy storage (LDES) is designed to store and discharge much larger quantities of electricity over many hours, meaning that the environmental implications shift from a conventional battery installation toward a materially larger energy-storage facility with greater fire, safety, noise, land-use, infrastructure and receptor-risk considerations

- 2.12 My conclusion is that this is overwhelmingly the case. Systems of guidance, consultation and oversight that developed when BESS were smaller in scale, limited in number and largely confined to industrial areas or remote locations are now being applied to a sector that is materially different in both its intensity and its spatial distribution.
- 2.13 In subsequent sections I identify a number of issues associated with the BESS safety regulatory regime - particularly the absence of independent oversight, the reliance on developer-led assessment, and the limitations of existing guidance – and conclude that these need to be addressed as a matter of urgency as the current arrangements are not fit for purpose.

3. The Absence of a Defined Safety Regulator

- 3.1 A central issue within the current framework is the absence of a clearly defined authority responsible for independently assessing fire and safety risks associated with BESS developments. Unlike other forms of infrastructure with comparable hazard profiles (oil refineries, nuclear power plants) these schemes do not fall within a structured regime of external safety oversight at the planning stage.
- 3.2. This absence goes to the heart of the concerns expressed in this report, and the issues this raises are examined in detail in subsequent sections.
- 3.3 In practical terms, it is important to make the point that this results in a system in which:
- no single body is tasked with independently verifying the adequacy of fire and safety assessments
 - there is no consistent mechanism for evaluating the assumptions underpinning developer submissions
 - responsibility for safety evaluation is dispersed across LPAs, advisory consultees, and developer-led documentation
- 3.4 This stands in contrast to other high-risk sectors, where independent scrutiny and clear lines of accountability are embedded within the regulatory system. In the case of BESS, that function is effectively absent.

4. The BESS Fire and Hazard Safety Regime Compared to Other Energy Infrastructure Sectors

- 4.1 A notable feature of grid-scale Battery Energy Storage Systems is that, although they are major energy infrastructure and may present serious fire, explosion, toxic gas, thermal runaway and emergency-response issues, they do not currently sit within a bespoke, well-developed, sector-specific safety regime equivalent to those applying to several other forms of energy infrastructure.
- 4.2 The contrast is significant. Other high-risk energy infrastructure is often subject to a clearer regulatory architecture, involving defined statutory regulators, safety-case duties, hazardous substances controls, COMAH⁴ duties, pipeline safety regulations, nuclear site licensing, environmental permitting, or specialist HSE/Office for Nuclear Regulation oversight. By comparison, BESS safety is largely addressed through a combination of general health and safety law, electrical safety law, DSEAR⁵ where applicable, industry guidance, manufacturer/operator duties, planning conditions, and advisory input from Fire and Rescue Services.
- 4.3 This by no means implies that BESS is unregulated, but it does mean that the planning system is often left to deal with site-specific public safety issues without the same clear, specialist, statutory safety architecture that exists for many other energy sectors, chiefly those set out in Table 1 overleaf:

⁴ The Control of Major Accident Hazards Regulations (2015). In England these are regulated jointly by the HSE and the Environment Agency

⁵ Dangerous Substances and Explosive Atmospheres Regulations

Table 1: Energy Infrastructure Safety Regulatory Regime by Sector

Energy infrastructure	Main safety regime/ regulator	Nature of safety control	Comparison with BESS
Nuclear power stations and nuclear sites	Office for Nuclear Regulation, nuclear site licensing, nuclear safety cases	Highly specialist & statutory. Safety regulated through licensing, permissions, inspection, enforcement & formal safety-case assessment.	Much stronger and more prescriptive than BESS. Nuclear safety is not left primarily to local planning judgement.
Offshore oil and gas	HSE/Offshore Major Accident Regulator, offshore safety case regime	Operators must demonstrate how major accident risks are controlled. HSE assesses safety cases, inspects, investigates and enforces.	Much more mature major-hazard regime than BESS. There is a dedicated safety-case structure for serious accident risks.
LNG terminals and major gas infrastructure	HSE, COMAH, hazardous substances consent, emergency planning	Sites involving dangerous substances subject to major accident hazard controls, including prevention, mitigation & emergency planning	Stronger than BESS where COMAH does not normally apply. BESS may present serious fire risks but is not generally treated as a COMAH
Underground gas storage/gas reception facilities	COMAH, HSE, Pipeline Safety Regulations where relevant	Integrated safety assessment of storage, wellheads, processing plant and pipework. HSE can advise on land-use planning and hazardous substances issues.	Clearer regulatory pathway than BESS, especially where dangerous substances and major accident hazards are recognised in statute.
Major accident hazard pipelines	Pipeline Safety Regulations, HSE notification and oversight	Specific legal regime for pipeline design, operation, maintenance, incident prevention and notification.	Pipelines have a dedicated statutory safety regime. BESS has no directly equivalent BESS-specific safety regulation.
Conventional power stations/large electrical substations	Health and Safety at Work Act, Electricity at Work Regulations, grid/operator safety rules, HSE oversight	Main focus is electrical safety, worker/public safety, safe systems of work, asset maintenance and operational control.	Some overlap with BESS on electrical risk, but BESS adds battery-specific hazards such as thermal runaway, re-ignition, toxic plume risk and water/firefighting complications.
Energy-from-waste plants/incinerators	Environmental permitting, HSE workplace safety duties, fire prevention and pollution controls	Environmental permits control emissions and operational risks; fire and process risks are addressed through permitting, operational controls and HSE duties.	Generally more structured on emissions/process regulation than BESS. BESS fire consequences may be significant, but regulatory control is less centralised.

Energy infrastructure	Main safety regime/ regulator	Nature of safety control	Comparison with BESS
Solar farms and wind farms	Planning system, general H&S duties, construction safety, electrical safety	Usually lower major-accident hazard profile. Safety issues are normally addressed through construction, electrical and operational management.	BESS is often treated procedurally like renewable infrastructure, but its risk profile is different because stored electrical/chemical energy can create acute fire and emergency-response hazards.
Grid-scale BESS	General H&S law, Electricity at Work Regulations, DSEAR where applicable, planning control, NFCC guidance, Fire and Rescue Service advice	No single bespoke statutory safety-case regime. Much depends on developer risk assessment, battery safety management plans, design standards, planning judgement and advisory consultee responses.	Regulatory gap is most apparent here. The LPA may be asked to determine public safety acceptability without the benefit of a dedicated statutory BESS safety regulator or mandatory independent safety-case approval.

- 4.4 The comparison shows that BESS occupies an unusual regulatory position. It is widely recognised and promoted as essential energy infrastructure, but it does not currently benefit from the same bespoke safety regime that applies to nuclear, offshore oil and gas, major gas storage, LNG terminals, COMAH sites or major accident hazard pipelines.
- 4.5 For planning purposes, this matters because the absence of an objection from HSE or the Fire and Rescue Service should not be treated as equivalent to a positive, site-specific finding that the development is safe. In many cases, no statutory body has undertaken a comprehensive “real world” assessment of the fire and hazard safety implications of the particular site, its access constraints, surrounding receptors, evacuation issues, water supply, toxic plume risk, re-ignition risk or emergency response practicality.
- 4.6 Accordingly, where a BESS is proposed close to sensitive receptors, the local planning authority should not assume that the wider regulatory system has already resolved those matters. It should instead require robust, independent, site-specific evidence demonstrating that the development would be safe in its lifetime and acceptable in its real-world context.

5. Limitations of Current National Guidance for BESS Fire Safety

- 5.1 Fire and Rescue Services do have the benefit on national guidance relating to BESS fire safety, but it is important to be aware of its limitations.
- 5.2 The National Fire Chiefs Council (NFCC) guidance on Battery Energy Storage Systems - first published in 2023 - is primarily aimed at supporting Fire and Rescue Services in engaging with the planning and operation of grid-scale BESS developments. It identifies lithium-ion batteries as presenting a significant fire risk - particularly due to thermal runaway, which can generate intense heat, toxic gases and explosions - and emphasises the need for a comprehensive risk management process led by the developer.
- 5.3 This includes designing out risk through layout and separation, incorporating fire detection and suppression systems, and preparing robust Emergency Response Plans developed in collaboration with local Fire and Rescue Services. The guidance draws on existing standards, research and case studies, and is intended to promote a consistent, proportionate and evidence-based approach to fire safety in the planning process.
- 5.4 It has been widely recognised however that the guidance is inherently limited in several important respects. It is advisory rather than regulatory, and Fire and Rescue Services are not statutory consultees in the planning process, meaning its application is inconsistent and dependent on local engagement. It largely consolidates existing standards rather than providing a fully developed, site-specific risk assessment framework, and therefore relies heavily on information supplied by developers.
- 5.5 More fundamentally, NFCC itself recognises that innovation in lithium-ion battery technologies can outpace safety standards and regulation, meaning that risks - particularly for newer, larger-scale, differently located BESS schemes - may not yet be fully understood or captured in existing guidance.

- 5.6 NFCC has acknowledged these gaps and has been actively updating its guidance, with a revised version⁶ which replaced the 2023 version in February 2026. The updated framework is more extensive, introducing clearer requirements for risk management processes, expanded operational guidance, and new technical areas such as explosion control, water supply, vapour cloud mitigation, and more detailed incident impact assessment. It also seeks to create greater national consistency and align requirements with international standards (e.g. spacing based on test evidence).
- 5.7 However, despite these improvements, key issues remain unresolved: uncertainty persists over how the guidance interfaces with the planning system, how consistently it will be applied, and how it will keep pace with rapidly evolving BESS deployment and technology. Industry responses have also highlighted a need for greater clarity and more frequent updates, underlining that the framework remains in transition rather than fully settled.
- 5.8 An interesting development is the publication by the Scottish Government in March 2026 of specific Battery Energy Storage Systems: planning guidance⁷. The guidance is directed expressly at applicants, planning decision-makers, consultees and communities and places considerable emphasis on appropriate siting, site-specific assessment and early engagement. In relation to fire safety it recognises thermal runaway, potentially prolonged fires and contaminated fire-water runoff, and advises that a site-specific approach should be adopted having regard to the particular site, development and battery technology.
- 5.9 It also identifies matters such as unit spacing, distances from boundaries and occupied buildings, emergency access and water supply as issues relevant to planning and design. Although the Scottish guidance does not create a new statutory fire-safety regulator — and itself recognises that the Scottish Fire and Rescue Service is not a statutory planning consultee — its publication demonstrates that a more explicit BESS-specific interface between planning, siting and fire safety is both possible and considered necessary within Great Britain. There is presently no directly equivalent comprehensive BESS planning guidance issued for England.

⁶ <https://nfcc.org.uk/consultation/draft-grid-scale-energy-storage-system-planning-guidance/>

⁷ [Battery Energy Storage Systems: planning guidance - gov.scot](#)

- 5.8 Fundamentally therefore, and irrespective of recent changes, the regulatory architecture for BESS appears relatively weak and unfocused. Table 2 below summarises current limitations.

Table 2: Limitations of BESS Fire and Hazard Safety Standards with Reference to NFCC Guidance

Subject	Issue
It is guidance rather than regulation	The current framework is predominantly guidance-based (e.g. NFCC), lacking statutory force or mandatory compliance standards. This creates variability in interpretation and application, with no consistent baseline for safety assessment or enforcement
Ill-defined Interaction with the planning system	There is no clear or formalised interface between BESS fire safety guidance and planning decision-making. It is unclear how LPAs should weigh guidance, what constitutes sufficient evidence, or how unresolved fire safety risks should influence the planning balance
Historic siting assumptions are embedded in guidance rather than recent deployment in wholly different settings	Existing guidance reflects a period when BESS developments were typically located in industrial settings, alongside grid infrastructure, or in sparsely populated areas with generous separation distances. It does not adequately reflect recent deployment patterns in semi-rural or edge-of-settlement locations
Scale, frequency, and proximity of modern BESS is not addressed	The rapid increase in the number, size (e.g. Long Duration BESS (LDES)), and clustering of BESS schemes is not fully accounted for. Guidance does not adequately address cumulative risk or the implications of much larger energy storage capacities
Limited addressing of the issue of sensitive receptors	Guidance provides insufficient direction on identifying and assessing multiple or complex sensitive receptors (e.g. residential, equine, livestock, businesses) in close proximity. It does not embed a 'real world' receptor-based risk assessment approach
Lack of encouragement for 'real world' risk assessment by FRS	Fire and Rescue Services are not explicitly guided or required to undertake site-specific, receptor-focused risk assessments. Engagement often remains high-level, without detailed interrogation of local constraints, access, or receptor vulnerability
Non-statutory consultee status of Fire and Rescue Services is a barrier to their engagement	FRS are not statutory consultees in the planning process. Their input is discretionary and may not be sought or may be limited in scope, reducing the consistency and robustness of fire safety consideration in planning decisions
Misinterpretation (specifically by LPAs) of FRS silence or limited response	The absence of objection - or a response focused only on operational matters - is often interpreted as confirmation that fire risks are acceptable. In reality, this may simply reflect the limited remit or scope of FRS engagement, not a holistic risk endorsement

Subject	Issue
Developer-led risk assessment has a potentially unhealthy dominance with regard to fire safety issues	Fire and hazard safety evidence is largely prepared and controlled by the applicant, with limited independent verification. This creates an inherent imbalance, particularly given the complexity and evolving nature of BESS risks
Guidance framework is clearly struggling to keep pace with change	As acknowledged within the sector, the rapid expansion of BESS deployment is outpacing the development of guidance and regulatory standards, leaving a transitional and incomplete safety framework

6. Comparison between UK BESS real world risk assessment and other parts of the world

- 6.1 BESS fire/hazard assessments are more codified in the US and parts of Australia than in the UK, which has noted previously is largely planning-led, case-by-case, and guided by NFCC rather than being enshrined in a single binding BESS fire code. In many countries, there are dictats involving mandatory codes, prescribed test evidence, formal fire safety studies, and enforceable installation standards.

The USA

- 6.2 In the USA, NFPA 855⁸ requires, or strongly points towards, a site-specific hazard assessment of the BESS in relation to nearby “exposures”. Where a nearby sensitive receptor is also a building, public way, occupied use, boundary, evacuation constraint or other exposure hazard, it should be considered within that assessment.
- 6.3 NFPA 855 is backed up with the International Fire Code (IFC)⁹, which treats stationary BESS as a defined class of fire-risk infrastructure. The IFC approach is materially different from the UK position.
- 6.4 BESS fire safety is commonly filtered through a fire-code approval regime, with the fire official acting as the decision-maker or approving authority for technical fire safety matters. The question is not simply: *“has the developer submitted a battery safety plan?”* It is: *“Does the installation comply with a specific fire-code framework, and has the Authority Having Jurisdiction (AHJ) accepted the Hazard Mitigation Analysis (HMA), test data, separation, detection, explosion-control and emergency-response arrangements?”*

New York

⁸ NFPA 855 is the USA’s National Fire Protection Association’s standard governing the safe installation of stationary energy storage systems (ESS), including lithium-ion batteries, with its latest major edition released in 2026. It defines requirements for system design, spacing, fire protection, hazard mitigation analysis (HMA), emergency response planning, and testing such as UL 9540A

⁹ <https://codes.iccsafe.org/codes/topics/fire>

- 6.5 After several BESS fires in 2023 (details of which are summarised in Appendix A), New York moved toward enhanced fire-code requirements, including stronger coordination, emergency preparedness and safety review for energy storage projects.¹⁰ That is a more incident-dependent, regulator-led model than the UK's present planning-consultation approach.

Australia

- 6.6 In Australia fire authorities often expect a formal fire safety study: detailed water calculations, fire-water retention, emergency response guide, site plans showing fire/explosion prevention measures, detection/protection systems and drainage arrangements.
- 6.7 The Victoria State guidance is particularly explicit. Its CFA Fire Safety Studies for Battery Energy Storage Systems, Version 1, June 2025¹¹ comes remarkably close to requiring exactly the kind of real-world, site-specific fire and hazard safety assessment that is clearly missing in the UK. It does not merely ask whether the battery product is safe in generic manufacturer terms, but instead requires analysis of the specific BESS, at the specific site, with its specific surrounding land uses, receptors, access, fire-water, plume, explosion and emergency-response implications.
- 6.8 The document requires the facility description to include the surrounding context: adjacent land uses, public and private roads, access points, infrastructure, vegetation, planning overlays, weather and the wider locality. It specifically requires locality mapping showing dwellings, schools, hospitals, childcare, aged-care facilities, community hubs, emergency services and their distance from the site.
- 6.9 Even more directly, Part 2 of the document requires other hazards or factors that may interact with or worsen BESS hazards to be identified, including surrounding land uses and sensitive receptors.

¹⁰ [Draft Fire Code Announced to Enhance Safety Standards for Battery Energy Storage Systems | NYSERDA](#)

¹¹ [CFA Fire Safety Studies for BESS](#)

- 6.10 Part 3 then requires consequence analysis for on-site and off-site receptors, including community sensitive receptors and environmental receptors. It identifies nearby dwellings, schools, childcare, aged care, hospitals, community facilities and emergency services as relevant receptor categories, and requires justification for the receptors, exposures, analysis and models used.

The EU Position: A Further Illustration of the UK's Regulatory Lag

- 6.11 A further comparison arises with the European Union. The EU has now recognised stationary Battery Energy Storage Systems as a distinct category requiring specific safety provision within its batteries regulatory framework. Regulation (EU) 2023/1542 does not merely deal with waste batteries or end-of-life obligations; it introduces wider lifecycle, sustainability, conformity and safety requirements, including specific requirements for stationary battery energy storage systems.
- 6.12 This is significant because it demonstrates that BESS safety is increasingly being treated elsewhere as a specific regulatory issue rather than as an incidental matter to be left primarily to general planning judgment, developer documentation and non-statutory guidance. Article 12 of the EU Batteries Regulation requires stationary battery energy storage systems placed on the market or put into service to be safe during normal operation and use. It also requires technical documentation to include evidence of testing against relevant safety parameters and to address hazards not otherwise covered, including mitigation instructions where hazards such as fire or explosion could occur.
- 6.13 It is important not to overstate the point. The EU Batteries Regulation is primarily a product and placing-on-the-market regime. It is not, by itself, a complete substitute for a site-specific planning-stage fire and hazard safety assessment of a particular BESS proposal in its particular location. It will not necessarily answer questions about proximity to sensitive receptors, emergency access, local water supply, toxic plume behaviour, animal welfare, evacuation constraints or the practicalities of Fire and Rescue Service intervention at a specific site.
- 6.14 However, that limitation does not reduce its relevance. On the contrary, it highlights the extent to which the EU has at least moved towards recognising stationary BESS safety as a discrete regulatory subject requiring defined technical documentation, safety testing and conformity processes. By comparison, Great Britain continues to rely on a more fragmented combination of older domestic battery legislation, general health and safety duties, planning control, developer-led Battery Safety Management Plans, NFCC guidance and non-statutory Fire and Rescue Service input.

- 6.15 The position is made more striking by the internal constitutional dichotomy created by the Windsor Framework. Regulation (EU) 2023/1542 applies in Northern Ireland because it replaces the previous EU Batteries Directive, which falls within Annex 2 of the Windsor Framework. As a result, the EU's more modern battery regime, including its provisions on stationary battery energy storage systems, applies in Northern Ireland but not directly in Great Britain.
- 6.16 The practical effect is that a higher and more contemporary battery regulatory standard applies in one part of the United Kingdom than in England, Scotland and Wales. This is not merely a technical curiosity. It exposes the weakness of the position in mainland UK. If a stationary BESS safety regime is considered necessary and appropriate in Northern Ireland as part of the continuing application of EU product rules, it is difficult to see why equivalent safety assurance should be unnecessary for similar or larger schemes in Great Britain, particularly where they are proposed close to homes, businesses, livestock or constrained rural access routes.
- 6.17 Appendix C summarises the principal differences between the EU/Northern Ireland position and the position in Great Britain. The comparison does not suggest that EU law provides a complete answer to all BESS fire and hazard safety concerns. Rather, it shows that the UK mainland position is comparatively underdeveloped. In Great Britain, the central planning safety question remains largely unresolved: who independently verifies that a large grid-scale BESS, in its actual location and with its actual surrounding receptors, has been assessed and demonstrated to be safe for its lifetime?
- 6.18 This reinforces the central conclusion of this report. The UK is not simply behind jurisdictions such as the United States and parts of Australia in relation to codified fire safety assessment; it is also behind the EU in recognising stationary BESS safety as a distinct regulatory issue. The result is a framework in Great Britain that remains overly dependent on applicant-led assurance, non-statutory guidance and local planning judgement, at precisely the point when BESS development is becoming larger, longer-duration and more frequently located close to sensitive receptors.

7. Reliance on Developer-Led Safety Documentation

- 7.1 As noted previously the current approach to BESS safety is unduly narrow, with a disproportionate emphasis on battery-level technical compliance and Battery Safety Plans, rather than a whole-system, site-specific risk assessment that properly accounts for off-site consequences and sensitive receptors.
- 7.2 In practice, this places significant reliance on the developer - who both prepares and largely controls the evidence base on fire and hazard risk - within a regulatory environment where independent scrutiny is comparatively limited and often fragmented. While developer-led assessments are not unusual in the planning system, the scale, duration and atypical behaviour of BESS fire events (including thermal runaway, toxic gas release and extended burn scenarios) raise legitimate concerns as to whether this model provides sufficient assurance of public safety.
- 7.3 The result is an arrangement that risks normalising a self-certifying approach to complex hazard assessment – developers effectively “marking their own homework” without the level of independent interrogation that would ordinarily be expected for infrastructure with potentially severe off-site impacts. In this context, it is entirely reasonable - and necessary - for decision-makers to question whether the current balance between developer control and independent oversight is robust, or whether it represents an unhealthy reliance on applicant-led assurance in a rapidly evolving and insufficiently regulated risk landscape.
- 7.4 At the centre of the assessment process is usually a Battery Safety Management Plan prepared by the developer or their consultants. These documents are often detailed and meticulous, but they remain fundamentally applicant-led.
- 7.5 What the current framework does not require is: independent validation of these safety plans, systematic testing of the assumptions on which they are based, and verification that all relevant risks have been identified
- 7.6 As a consequence, the process relies heavily on the completeness and accuracy of the information provided by the developer. While there is no reason to assume bad faith, the absence of independent verification means that the robustness of the assessment cannot be assured. In effect, the system operates on a model of informed reliance rather than independent scrutiny.

8. Absence of Site-Specific, Real-World Assessment

8.1 All this points to a lack of any consistent requirement for site-based appraisal of the surrounding environment. There is no standard expectation that:

- sensitive receptors will be independently identified and mapped
- separation distances will be verified on the ground
- the practical realities of access, containment and surrounding land use will be tested

8.2 This is a significant omission. The risks associated with BESS are not uniform but vary according to the characteristics of the site and its context. Without a grounded understanding of those conditions, safety assessments may remain abstract and insufficiently responsive to real-world circumstances.

8.3 What this results in is a substantial mismatch between observable on the ground realities and what might identify through office based, desk-top led methodologies. Table 3 below shows the discrepancies between the real world and the theoretical.

Table 3: Real World v Desk-Based Risk Assessment – Flaws in the Latter Starkly Revealed

Aspect	Real-World (Site-Specific) Risk Assessment – Advantages	Desk-Based / Battery-Focused Assessment – Limitations
Understanding of Context	Captures actual site conditions, including proximity to sensitive receptors (e.g. residential uses, equine and other sensitive livestock, kennels, poultry, dairy), topography, drainage, and access constraints	Relies on generic assumptions; often omits or underplays nearby receptors and site-specific constraints
Identification of Sensitive Receptors	Actively identifies and assesses all receptor types and uses, including mixed-use properties (e.g. residential + commercial + animal welfare)	Typically limited to mapped residential receptors; frequently overlooks non-standard or mixed uses

Aspect	Real-World (Site-Specific) Risk Assessment – Advantages	Desk-Based / Battery-Focused Assessment – Limitations
Fire Spread & Escalation Risk	Considers how a fire would behave in situ, including separation distances, wind, barriers, and interaction with adjacent land uses	Focuses narrowly on cell/module failure and containment, not wider fire dynamics
Emergency Access & Response	Tests actual road widths, visibility, passing places, and response times; reflects whether fire appliances can realistically access and operate	Assumes access is adequate based on plans; rarely interrogates real-world constraints (e.g. narrow rural lanes)
Water Supply & Firefighting Strategy	Assesses availability of water sources, hydrants, and containment of contaminated runoff on site	Often assumes standard firefighting inputs without verifying local infrastructure
Human Behaviour & Occupancy Patterns	Accounts for day/night occupation, visitors, business activities, and vulnerable users (e.g. clients, workers, children)	Treats receptors as static and simplified (e.g. “residential dwelling”), ignoring intensity and variability of use
Animal Welfare Implications	Evaluates risks to equine and other sensitive livestock receptors, including smoke inhalation, stress, evacuation impracticalities	Rarely considers animal receptors or assumes equivalence with human residential receptors
Cumulative & Sequential Risk	Considers interaction with nearby developments, infrastructure, and potential cumulative hazards	Typically assesses the scheme in isolation
Credibility of Mitigation Measures	Tests whether mitigation (e.g. acoustic fencing, separation distances, access routes) works in practice on the ground	Accepts mitigation at face value based on design intent or modelling
Role of Fire and Rescue Services (FRS)	Enables informed engagement with FRS, grounded in actual site conditions and realistic scenarios	Encourages a light-touch or generic FRS response, often reinforcing reliance on developer-provided information
Decision-Making Confidence (LPA)	Provides the LPA with robust, evidence-based understanding of risk, supporting sound planning judgement	Creates a false sense of security (“no objection from FRS = no risk”) despite incomplete assessment
Adaptability to Evolving BESS Scale (e.g. LDES)	Capable of addressing larger-scale and longer-duration systems (e.g. 6–8 hour LDES) and their extended risk profiles	Often based on legacy assumptions from smaller, short-duration BESS in industrial/remote settings
Compliance with ‘Safe Development’ Policy Tests (NPPF)	Directly supports assessment of whether development is “safe for its lifetime” and suitable for its location	Struggles to demonstrate compliance beyond generic safety assertions
Transparency & Scrutiny	Enables independent verification and clearer scrutiny by consultees, members, and the public	Highly dependent on developer-led technical narratives, limiting transparency

9. What are the risks associated with grid scale BESS?

- 9.1 The risks arising from Battery Energy Storage Systems (BESS) are fundamentally different from many other forms of development because they combine a low probability of failure with very high consequence outcomes.
- 9.2 The principal hazard relates to lithium-ion battery failure, particularly thermal runaway, which can lead to intense, difficult-to-control fires, explosions, and the release of toxic gases. Unlike conventional fires, BESS incidents may persist for extended periods - often hours or even days - and can involve re-ignition after initial containment. As a result, risk cannot be understood purely in terms of likelihood; it must be assessed in terms of severity, duration, and spatial extent of impact, particularly beyond the site boundary.
- 9.3 A defining feature of BESS risk is that it does not remain contained within the boundary of the site. In practice, emergency response strategies often involve exclusion zones and controlled burn approaches, meaning that surrounding land uses become part of the hazard environment. Toxic emissions (including hydrogen fluoride and other harmful compounds), smoke plumes, and potential blast effects can extend off-site, directly affecting nearby receptors. This creates a situation where the functional risk envelope extends beyond the site, raising fundamental questions about compatibility with surrounding land uses.
- 9.4 The issue becomes significantly more acute in the presence of sensitive receptors. These include residential properties, equine and other sensitive livestock uses, kennels, poultry units, and businesses with visiting members of the public. Such receptors are inherently more vulnerable because they either involve people in domestic settings, animals that are difficult to evacuate, or activities dependent on access and environmental quality.
- 9.5 Where BESS is located in close proximity - particularly within tens of metres - these receptors may fall directly within the foreseeable impact zone of a major incident. As this note highlights, current assessment approaches frequently fail to identify and evaluate these receptors in a genuinely “real world” context, instead relying on simplified, desk-based assumptions.
- 9.6 A further and often overlooked dimension is the presence of multiple and layered sensitive receptors within a single location or property. In residential environments, occupants may be responsible not only for their own safety but for that of children, elderly individuals, or those

with limited mobility, alongside the care of pets or livestock. In an emergency scenario, this creates complex and competing demands - evacuation may be delayed, decision-making becomes more complex, and the risks associated with hesitation or partial evacuation increase significantly.

- 9.7 The growth of residential-based businesses - such as hairdressing, beauty treatment, counselling, childminding or other client-facing services - adds a further layer of vulnerability. Clients may be unfamiliar with the property, unaware of escape routes, and less able to respond quickly to an evolving hazard. The result is that what might be assumed to be a simple “residential receptor” in a desk-based assessment is, in reality, a multi-occupancy, multi-function environment with heightened vulnerability and reduced resilience in an emergency.

- 9.8 This leads to a critical dichotomy between industrial, co-located energy environments and the alternative reality of residential or mixed-use settings. Historically, BESS has been deployed within or adjacent to existing energy infrastructure - such as power stations, substations, and established industrial energy complexes. In these locations, higher-risk activities are expected and planned for. Workers are typically present during defined hours, trained in safety procedures, and operating within sites designed to accommodate industrial hazards. Not only will they be fully awake whilst present, they will be alert to danger,

- 9.9 Moreover, separation distances are built in, emergency access is engineered to a high standard, and the surrounding land uses are generally compatible (i.e. other energy or industrial operations). The co-location of BESS with adjoining power stations or grid infrastructure means that risk is absorbed within an already managed and regulated energy environment.

- 9.10 By contrast, when BESS is introduced into semi-rural or populated environments, the same hazards take on a materially different character. Residential receptors are occupied continuously, including at night; occupants are untrained; evacuation is less predictable; and buildings are not designed with industrial hazard mitigation in mind. The presence of equine and other sensitive livestock further compounds this, as animals may well be highly stressed and even unmanageable and as a consequence cannot be easily or safely evacuated under emergency conditions.

9.11 In such contexts, what might be an acceptable and manageable risk within an industrial energy cluster becomes a direct risk to public safety, animal welfare, and community functioning. The rapid expansion of BESS into such environments - at increasing scale and proximity to receptors - therefore represents a fundamental shift in risk profile that current guidance and assessment frameworks have not fully caught up with.

9.12 Table 4 below summarises the key risks associated with BESS and identifies potentially consequences depending on setting:

Table 4: Key Risks Arising from BESS (Including Receptor Sensitivity and Context)

Nature of Risk	How This Might Manifest Itself	Consequences (Industrial Settings or Co-located with Energy Infrastructure)	Consequences (Residential/Sensitive Receptors)
Thermal runaway and fire	Battery cell failure propagating through modules	Managed within controlled industrial/energy site; trained response	Direct exposure to heat, smoke, prolonged fire events
Explosion/rapid escalation	Gas build-up and ignition	Contained within designed safety zones of energy/industrial complex	Shock risk to nearby dwellings, animals, occupants
Toxic gas release	Emission of hydrogen fluoride and other gases	Managed through controlled evacuation and site protocols	Public health risk; residents and livestock exposed or confined
Extended duration incidents	Fires lasting hours/days; re-ignition	Managed within operational energy site with contingency planning	Prolonged disruption; evacuation or shelter-in-place
Off-site impact zone	Need for exclusion zones	Typically remains within wider industrial/energy landholding	Extends into homes, farms, businesses, PROWs
Emergency access constraints	Requirement for fire service access	Designed access roads and circulation within energy sites	Narrow rural lanes; conflict between access and evacuation
Impact on animals	Noise, smoke, stress	Rare or not applicable in energy complexes	High risk to equine and other sensitive livestock
Business disruption	Access restriction, contamination	Managed within industrial operations	Loss of trade; disruption to rural/visitor businesses
Human behaviour factors	Occupancy patterns	Trained workforce; regulated environment	Unpredictable occupancy; vulnerable individuals; unfamiliar visitors
Cumulative/contextual risk	Interaction with nearby infrastructure	Considered within energy cluster planning	Often unassessed; multiple receptors increase risk

10. BESS Fire and Hazard Safety and the Spectre of Grenfell

- 10.1 It is important, in drawing any comparison with historic fire tragedies, to proceed with care and due respect. The loss of life in the Grenfell Tower fire remains one of the most profound failures of building safety in recent UK history. Any reference to it in the context of Battery Energy Storage Systems (BESS) is not intended to equate circumstances, but to highlight a shared structural issue: the management of low-probability, high-consequence risks within regulatory systems that may provide the aura of reassurance without delivering a full understanding of real-world hazard.
- 10.2 As set out in this report, there is still a clear gap in the current framework for BESS fire and hazard safety, in that no single body undertakes a comprehensive, independent “real world” assessment of risk. Instead, as already noted, responsibility is fragmented between the Local Planning Authority, advisory consultees, and developer-led documentation. The result is a system which can give rise to a false sense of security - particularly where the absence of objection is taken to indicate the absence of risk.
- 10.3 The relevance of Grenfell in this context lies not in the specific mechanics of fire, but in what it demonstrated about systemic failure:
- risks that were understood in principle were not fully appreciated in practice
 - assumptions about containment proved entirely false under real-world conditions
 - the interaction between fire behaviour, building form, and human occupancy led to consequences far beyond those anticipated
 - the severity of outcome, rather than the probability of occurrence, proved in the end to be the critical determinant
- 10.4 This is directly relevant to BESS. Fires within battery storage systems are uncommon, but they are not unknown. When they do occur, they are characterised by prolonged duration, difficulty of suppression, potential for re-ignition, and the release of toxic gases. Emergency response strategies often involve containment and controlled burn, rather than immediate extinguishment, meaning that the effects of an

incident extend beyond the site boundary. In these circumstances, surrounding land uses - including residential properties, equine facilities, and businesses - become part of the hazard environment.

- 10.5 A case in point was a BESS fire in Monterey, California. On 16 January 2025, a major fire broke out at Vistra's Moss Landing 300MW/1,200 MWh lithium-ion BESS. The incident produced large flames and a dense smoke plume, triggered evacuation orders for around 1,500 residents, closed parts of US Highway 1, and led responders to allow the batteries/building to burn rather than attempt direct suppression. Around 55% of batteries burned. The key issue was thermal runaway propagation.
- 10.6 Moss Landing is a battery hall rather than open air freestanding containers, so it is not directly comparable to the typical UK grid scale BESS. It does however demonstrate a real-world worst-case grid-scale incident where:
- Emergency response became defensive: in what appears to be a very common approach, the practical strategy was to let the fire burn, which challenges any planning claim that a large BESS fire is simply "extinguishable"
 - Evacuation distance became a live issue: around 1,500 residents were evacuated. That is directly relevant where a proposed UK BESS is close to sensitive receptors and access is constrained
 - Post-fire contamination has not proved easy to resolve: EPA¹² involvement in removal/disposal shows that the aftermath was not just a fire-service incident but a hazardous recovery and environmental management problem, with evidence of considerable heavy metal pollution in an adjoining Elkhorn Slough National Estuarine Research Reserve, where there were significant depositions of battery-associated heavy metals including nickel, manganese and cobalt¹³

¹² EPA is the United States Environmental Protection Agency, with some common functions with the HSE in the UK, although the USA environmental regulatory regime differs considerably. The EPA became involved because of air monitoring, environmental contamination, hazardous battery debris, and clean-up/disposal issues.

¹³ One subsequent estimate put deposition of these battery-associated metals within the approximately 300-acre study area at some 55,000 lb (c.25 tonnes), illustrating that the off-site environmental consequences of a major BESS fire may be substantial even where immediate human casualties do not occur

- “No injuries” does not mean “no harm”: the incident still caused evacuation, road closure, smoke exposure concerns, contamination investigations and prolonged shutdown

- 10.7 Closer to home, incidents such as the fire at Carnegie Road, Liverpool, on 15 September 2020¹⁴ demonstrate that UK grid scale battery fires are not theoretical. That incident required a managed response and reflected the inherent characteristics of lithium-ion battery failure, including thermal runaway and extended burn periods. As the scale and number of BESS developments increase - as this report evidences - the likelihood of further such incidents, somewhere within the system, becomes a matter of probability rather than speculation.
- 10.8 The critical issue for the planning system is therefore one of location and consequence. A BESS fire within an industrial, co-located energy environment is materially different from one situated in close proximity to residential or mixed-use receptors. In the latter case, the hazard cannot be considered contained. It directly engages public safety, animal welfare, and the ability of occupants - often untrained and potentially vulnerable - to respond effectively under emergency conditions.
- 10.9 In this context, the key planning question is not whether a future BESS fire will occur – although it does seem a virtual certainty - but whether the development is being proposed in a location where, if such an event were to arise, its consequences could be safely managed. Where sensitive receptors lie within the foreseeable zone of impact, and where emergency access and response are constrained, there is a clear and reasonable basis to conclude that the risk may not be acceptable.

¹⁴ Carnegie Road BESS fire, Liverpool (15 September 2020): A fire at a grid-scale lithium-ion battery energy storage facility involving a containerised unit. The incident could not be extinguished by fire crews and instead burned itself out over approximately 59 hours, demonstrating the challenges of suppressing lithium-ion battery fires, including thermal runaway, prolonged burning, and risk of re-ignition.

11. Consequences for the Planning System – An overall snapshot

11.1 By pulling together the various strands covered in the earlier part of this report it is possible to identify a worrying void in the way in which real world risk assessment for BESS fire and safety hazard is currently engineered. Table 5 below provides a snapshot of the way in which such a void has been created.

Table 5: Regulatory Roles and the Fire & Hazard Safety Assessment Void in BESS Development

Organisation	Role in BESS Fire & Safety	Actual Scope of Involvement	Key Limitations/Gaps	Implications for Decision-Making
Government (Policy & Legislative Framework)	Overarching planning and safety policy (NPPF, national energy policy, etc)	Provides high-level policy support for renewable energy and general safety expectations (e.g. “safe in its lifetime”)	• No BESS-specific regulatory regime for fire and hazard safety • No requirement for a real-world, site-specific fire risk assessment at planning stage • Policy assumes existing regimes sufficient when not configured for modern grid scale BESS	Establishes policy support without corresponding regulatory depth, creating reliance on local interpretation and leaving critical safety issues under-defined
Health and Safety Executive (HSE)	Statutory body for health and safety regulation	Limited or no direct involvement in fire risk assessment for planning-stage BESS; where engaged, operates within a narrow regulatory remit	• Does not undertake detailed planning-stage fire and hazard assessments for grid scale BESS • Often defers to planning system • Absence of objection reflects absence of remit, not absence of risk	Creates a false sense of reassurance; decision-makers may incorrectly assume risks have been assessed and accepted
LPA	Primary decision-maker responsible for determining planning applications	Must weigh planning balance, including safety, based on submitted evidence and consultee responses	• No in-house fire/hazard safety expertise for complex BESS risk • No single authoritative assessment to rely upon • Forced to rely on fragmented inputs (developer reports, limited consultee advice)	Leads to decision-making under uncertainty, where safety is inferred rather than demonstrated; exposes decisions to challenge (including
Fire and Rescue Service (FRS)	Non-statutory consultee providing fire service input	Advisory role, typically focused on operational response and review of Battery Safety Plans	• Limited/no “real-world” hazard assessment • Focus on response, not consequence acceptability • Engagement often limited in scope • Silence or no objection may reflect limited remit, not risk acceptance	Risk that “no objection” is misinterpreted as “no risk”; critical hazards (especially near sensitive receptors) remain untested in planning terms

- 11.2 That void will be examined shortly. Firstly it is worth examining the way in which responsibilities for determining applications for BESS and their attendant safety issues have been devolved from government to local planning authorities, and the consequences of doing do.
- 11.3 In 2020, the Government made a deliberate policy choice to treat battery energy storage systems (BESS) as a form of infrastructure to be determined through the local planning system, rather than through the nationally significant infrastructure project (NSIP) regime. Prior to this change, electricity storage schemes above 50 MW fell within the NSIP thresholds under the Planning Act 2008 and would have been examined by the Planning Inspectorate with final determination by the Secretary of State. This change now means that all standalone BESS proposals - regardless of scale – in England¹⁵ are now determined by Local Planning Authorities (LPAs)¹⁶.
- 11.4 This approach places BESS in a markedly different position from most other forms of large-scale energy infrastructure. Technologies such as major generating stations, overhead transmission lines, and large substations typically remain within the NSIP regime, where decisions are taken centrally, supported by National Policy Statements and examined through a specialist, infrastructure-focused process.
- 11.5 By contrast, even very large BESS schemes - often comparable in scale, complexity and potential hazard profile - are assessed at the local level, frequently by authorities lacking specialist energy infrastructure expertise or access to a bespoke regulatory framework governing fire and safety risk. In effect, responsibility for determining the acceptability of nationally significant-scale storage infrastructure has been devolved without an equivalent transfer of technical framework or institutional capacity.

¹⁵ This is the case in England: Wales and Scotland have different regulatory regimes (BESS application of over 50MW are for instance determined by the Scottish Government).

¹⁶ An exception arises where electricity storage forms part of a wider generating station (for example, a solar farm). In such cases, the combined development may still fall within the NSIP regime if it exceeds the relevant generating capacity thresholds, and the BESS component is then considered as part of that nationally significant project rather than as a standalone scheme.

- 11.6 This has important implications for how government regards fire and safety hazard risk. Rather than being addressed through a unified national regime with clearly defined standards and accountabilities, BESS safety is instead filtered through general planning policy. Government relies on:
- the National Planning Policy Framework (NPPF) (particularly the requirement that development be “*safe for its lifetime*”)
 - non-statutory guidance such as that produced by the National Fire Chiefs Council (NFCC)
 - consultation responses from local Fire and Rescue Services, which are not statutory decision-makers in the planning process
- 11.7 The consequence is that BESS fire and safety hazard is not treated as a centrally regulated, infrastructure - specific risk (as is the case for many other energy technologies), but rather as a planning judgement exercised locally, in the absence of prescriptive national standards and a clearly defined body responsible for assessing “real world” risk.
- 11.8 This reinforces the importance of LPAs interrogating not just battery safety design, but also site-specific factors - particularly proximity to sensitive receptors, access constraints, and emergency response practicality - when determining whether a proposal is genuinely “safe and suitable for its location.” The fact that this appears to rarely happen raises a significant concern.
- 11.9 A separate and perhaps even more worrying concern is the extent to which HM Government *thinks* that BESS Fire and Hazard Safety issues are comprehensively covered by a range of responsible authorities. In February 2026 Minister of State for Energy Michael Shanks wrote to Ben South Norfolk MP Ben Goldsborough in response to concerns expressed by a constituent. That response is set out in Appendix C
- 11.10 The ministerial response addresses fire and safety hazard risk primarily through a run through of existing regulatory frameworks (HSE), general legal principles (developer responsibility), and guidance-based engagement (NFCC and Fire and Rescue Services). However, when directed toward strictly to fire and safety hazard considerations, the response is notably high-level, generic, and process-driven, with no evidence of engagement with real-world risk conditions, site-specific hazards, or the consequences of a BESS fire event in a particular location. The consequence is that far too much faith is placed on institutional structure rather than the nuts and bolts of a thorough safety assessment.

Table 6: BESS Fire and Safety Hazard – Weaknesses in the February 2026 Ministerial Response

Issue	Ministerial Position	Failure/Weakness	Real-World Fire & Hazard Risk Implication
Reliance on HSE as primary safeguard	States BESS are regulated under a “robust framework” overseen by HSE	HSE is not a BESS-specific regulator and does not undertake site-specific planning risk assessments	No independent, holistic assessment of fire/explosion risk in the actual development context
Developer-led risk control accepted as sufficient	Emphasises principle that those who create risk are best placed to manage it	Assumes objectivity in developer-led safety assessments without scrutiny	Potential understatement or omission of worst-case fire scenarios and off-site consequences
Use of guidance rather than enforceable standards	References HSE and NFCC guidance	Guidance is non-statutory, evolving, and not consistently applied	Inconsistent safety outcomes; no guarantee that key fire risks are fully assessed or mitigated
Overstatement of Fire & Rescue Service role	Encourages engagement with local FRS and emergency planning	FRS are non-statutory consultees and typically focus on response, not full hazard assessment	Absence of objection may be misinterpreted as confirmation of safety when risks remain unexamined
No requirement for ‘real world’ fire risk assessment	Focus on frameworks, duties, and consultation	No reference to a comprehensive, site-based fire and hazard risk assessment	Key risks—fire spread, toxic smoke, explosion, access constraints—may not be properly evaluated
Failure to consider proximity of receptors	No mention of surrounding land uses or populations	Ignores how fire risk interacts with nearby people, animals, or buildings	Underestimates consequences of a BESS fire, particularly in non-industrial or semi-rural settings
No distinction by scale or duration of BESS	Treats BESS generically within regulatory framework	Does not recognise that larger or long-duration systems present materially greater risks	Fire duration, intensity, and emergency response challenges may be significantly underestimated
Assumption that emergency planning equates to safety	Refers to emergency management plans with FRS	Emergency response planning does not reduce likelihood or magnitude of an event	Risks remain inherent; focus shifts to response rather than prevention or impact minimisation
No engagement with fire dynamics or known incident characteristics	No discussion of fire behaviour or precedent incidents	Ignores evidence of prolonged, difficult-to-extinguish BESS fires	Fails to consider duration, re-ignition risk, or limits of fire service intervention
Procedural reassurance substituted for evidential assessment	Presents regulatory framework as comprehensive	No evidence that the framework has been applied to assess this scheme’s fire risks	Creates false confidence that fire and safety hazards have been adequately addressed

The Limited Role of the Health and Safety Executive

- 11.11 It is important to be clear that the concerns identified in this report should not be read as criticism of the Health and Safety Executive. HSE is a specialist safety regulator, but it has not been assigned a specific planning-stage role as the independent assessor of fire and hazard safety for grid-scale BESS. Its limited involvement reflects the structure of the regulatory system, not any failure by HSE to perform a function it has been given.
- 11.12 HSE's own BESS guidance is directed principally at those with duties across the lifecycle of a BESS, including designers, installers and operators. It identifies relevant duties under legislation such as the Health and Safety at Work etc. Act, DSEAR, the Electricity at Work Regulations, the Management Regulations and CDM Regulations. This is important, but it is not the same as HSE acting as a statutory consultee on every BESS planning application, or undertaking a site-specific planning assessment of thermal runaway, fire spread, explosion, toxic gas release, emergency access and impacts on nearby sensitive receptors.
- 11.13 HSE does have a well-defined planning role in other hazard contexts. It is a statutory consultee for planning applications around major hazard sites and major accident hazard pipelines, where consultation distances have been set and where development may increase the population exposed to residual major-accident risk. It is also a statutory consultee on hazardous substances consent applications, where HSE risk assessors advise the hazardous substances authority and may set consultation zones. HSE's methodology also identifies specific specialist roles in relation to hazardous substances, major accident hazard pipelines, licensed explosives sites and, in some cases, developments near licensed explosives or nuclear installations.
- 11.14 This helps explain why HSE may become involved in energy or infrastructure schemes where there is a clear statutory trigger: for example, development within the consultation zone of a COMAH/major hazard establishment, development near a major accident hazard pipeline, a proposal requiring hazardous substances consent, or a scheme involving licensed explosives or other regulated hazardous infrastructure. Large-scale petrol storage, hydrogen infrastructure, gas pipelines, chemical storage, explosives sites and some NSIP/DNS projects are examples of situations where HSE's planning role may be engaged because the relevant regime expressly brings it in.

- 11.15 By contrast, a standalone BESS proposal will not usually trigger that same statutory planning-consultation mechanism merely because it involves lithium-ion batteries, thermal runaway risk, toxic smoke, explosion potential or a controlled-burn strategy. Those are plainly safety-relevant issues, but the current regime generally leaves them to be addressed through developer-led risk documentation, general health and safety duties, Fire and Rescue Service engagement, and the Local Planning Authority's planning judgement. That is precisely the structural gap identified elsewhere in this report.
- 11.16 The consequence is that the absence of an HSE objection should not be treated as positive confirmation that BESS fire and hazard risks have been independently assessed and found acceptable. It may simply mean that the application has not fallen within HSE's defined statutory planning remit.
- 11.17 This distinction is critical. For schemes such as large LDES BESS, particularly where they are close to sensitive receptors, the issue is not that HSE has failed to act; it is that the regulatory framework has not allocated to HSE, or to any equivalent body, the role of undertaking a comprehensive, real-world planning-stage assessment of BESS fire and hazard safety.

The Difficult Position of Local Planning Authorities

- 11.18 Local Planning Authorities are placed in an exceptionally difficult position when assessing fire and hazard safety risks associated with grid-scale BESS. In most two-tier areas the LPA and the Fire and Rescue Service sit in separate organisations, while as noted above HSE is not routinely engaged as a statutory consultee for BESS planning applications. Even where an authority sensibly consults HSE or the local FRS voluntarily, there is no guarantee that either body will provide the kind of comprehensive, site-specific hazard assessment needed to resolve the planning question.
- 11.19 The difficulty is structural. The LPA remains the decision-maker and must be satisfied that the development is acceptable in planning terms, including whether it is safe and suitable for its location. Yet the technical issues are highly specialised: thermal runaway, fire propagation, explosion risk, toxic gas dispersion, contaminated fire-water runoff, emergency access, evacuation and the vulnerability of nearby

receptors. The report already recognises that LPAs do not generally possess this expertise in-house and are therefore dependent on applicant material and consultee responses.

- 11.20 This creates a particular problem where HSE does not intervene or explains that the matter falls outside its planning remit, and the Fire and Rescue Service either raises no objection or simply requires the developer to provide a Battery Safety Plan. In those circumstances, the LPA may be left with an apparently reassuring consultee position, but without any single competent body having undertaken a full “real-world” assessment of fire and hazard risk. The report already notes the danger that “no objection” from FRS may be misinterpreted as “no risk”, when it may simply reflect the limited remit or scope of FRS engagement.

- 11.21 The options available to the LPA are unattractive. It may seek independent third-party fire and hazard safety advice, but that raises practical questions: who should be instructed, against what assessment framework, at what cost, and within what timescale? Specialist BESS fire-safety expertise is not the same as ordinary Environmental Health, building control, or general fire engineering advice.

- 11.22 Neither is it realistic to expect most district planning authorities, after years of diminished local government resources, to maintain in-house expertise capable of interrogating large-scale lithium-ion BESS proposals at the level required. Aside from anything else, the local authority may not be the subject of any grid scale BESS applications, so such resources would be wasted. And if a proposal were to emerge, the authority would struggle to get the expertise in place within the timeframe of a planning application.

- 11.23 There is then a further difficulty. If internal officers, Environmental Health staff, highways officers, emergency planners, or external consultants do raise concerns, the LPA still needs a mechanism for resolving them. In the absence of a statutory BESS safety regulator, there is no obvious body whose view conclusively determines whether the residual risk is acceptable. A consultant may identify unresolved issues; the applicant may dispute them; FRS may remain silent or limit its comments to operational response; HSE may not be engaged. The LPA is then left to make a planning judgement on complex safety matters without a clear national benchmark, formal technical arbiter, or mandatory assessment methodology.

- 11.24 This is not a criticism of LPAs. It is a recognition that the present system asks them to perform a role for which the planning system was not designed. The report's core point is therefore reinforced: responsibility is dispersed between LPAs, advisory consultees and developer-led documentation, while no single body is tasked with independently verifying the adequacy of BESS fire and safety assessments. In that context, LPAs are exposed to two equal and opposite risks: either they approve schemes on the basis of incomplete reassurance, or they seek to resist them without the benefit of a clearly mandated expert safety body to support their concerns.
- 11.25 The practical consequence is that, where a BESS proposal is large-scale, novel, long-duration, or close to sensitive receptors, the absence of objection from HSE or FRS should not be treated as determinative. The proper question is whether the evidence before the LPA positively demonstrates that the proposal has been assessed in its real-world context and would be safe for its lifetime. Where that evidence is absent, the LPA is entitled to conclude that the applicant has failed to discharge the burden of demonstrating safety, rather than being forced to fill the regulatory gap itself.

The Issues around Reliance on Fire and Rescue Services

“Focusing on one single aspect of a BESS (battery safety) but not considering the wider hazard pathways ... is analogous to clearing an aircraft for take-off on the basis of engine readiness alone, without verifying the acceptable condition of the fuselage, control systems, landing gear, or fuel sufficiency for the intended flight.” (Paragraph 11.30)

- 11.26 Given the aforementioned, limited roles of both HSE and local authorities, Fire and Rescue Services often become the primary source of advice on fire and safety matters. Their involvement is clearly valuable, but it is important to recognise the limitations of their role.
- 11.27 Like HSE, Fire and Rescue Services are not statutory consultees for BESS developments, and their function within the planning process is advisory rather than regulatory. They are not mandated or resourced to undertake comprehensive, independent risk assessments of complex infrastructure proposals.

- 11.28 In practice, their input typically focuses on reviewing the developer’s submissions and identifying whether appropriate mitigation measures have been proposed. Typically this involves reviewing and approving the applicant’s Battery Safety Plan.¹⁷
- 11.29 However, this falls far short of a full scale ‘real world’ risk assessment of the BESS proposal. A BESS Battery Safety Plan typically sets out mitigation and response measures but falls well short of a full risk assessment, as it does not rigorously evaluate the likelihood and consequence of worst-case scenarios, cumulative effects, or site-specific impacts on nearby sensitive receptors and the wider environment.
- 11.30 Focusing on one single aspect of a BESS (battery safety) but not considering the wider hazard pathways identified in the previous paragraph is analogous to clearing an aircraft for take-off on the basis of engine readiness alone, without verifying the acceptable condition of the fuselage, control systems, landing gear, or fuel sufficiency for the intended flight.
- 11.31 If one wants a clear, single example of how Fire and Rescue Services can fail to engage in a comprehensive assessment of BESS fire and safety risk, one need look no further than Norfolk Fire and Rescue Service’s response to the proposed Field Long Stratton BESS (South Norfolk planning application 2025/1689) – the application considered as a case study in Annex A to this report). Despite unambiguous evidence regarding the inadequacy of the proposed secondary emergency access to the BESS, Norfolk Fire and Rescue Services did not raise an objection. Instead, this critical issue was identified and pursued by their colleagues in Norfolk Highways, who effectively raised the concern on NFRS’s behalf.
- 11.32 The unwillingness of the Fire and Rescue Service to identify and articulate real-world fire and safety risks does more than simply leave gaps in the evidential base; it actively distorts it. In the absence of a clear, reasoned assessment from the FRS, the Local Planning Authority is deprived of the holistic understanding necessary to rigorously evaluate the hazard profile of the proposed BESS.

¹⁷ An applicant’s Battery Safety Plan sets out the measures to prevent, detect, contain and respond to battery-related incidents, including fire, thermal runaway, and associated toxic emissions, across the full lifecycle of the BESS. It typically covers system design and layout, separation distances, fire detection and suppression, emergency access and response procedures, coordination with Fire and Rescue Services, and ongoing monitoring, maintenance, and incident management protocols.

- 11.33 More alarmingly, this silence can be misinterpreted as reassurance - creating a false sense that no material fire or safety issues arise. The implicit logic becomes: *“the FRS has raised no objection; therefore no such risks exist,”* when in reality the absence of comment may reflect a failure of scrutiny rather than the absence of risk. The response can come to carry significant weight in decision-making, effectively acting as a proxy for a more formalised safety assessment that has not, in fact, been undertaken.

The Role of Planning Inspectors in BESS Fire and Safety Issues

- 11.34 Planning Inspectors can and do consider BESS fire and safety issues, but they are not specialist fire regulators. Their role is to determine, or in the case of Development Consent Orders to examine and recommend, whether the proposal is acceptable in planning terms. Fire and safety become material planning issues where they bear on site suitability, mitigation, emergency access, nearby receptors, environmental pollution and whether the development would be safe in its location over its lifetime.
- 11.35 Inspectors encounter BESS in two principal contexts: as Examining Authorities for nationally significant energy infrastructure projects, including DCO schemes where battery storage forms part of a wider proposal; and in section 78 appeals against refusal or non-determination of standalone BESS applications. In both settings they apply planning judgement to the development plan, national policy, guidance and the evidence before them.
- 11.36 The central point is that Inspectors are evidence-led. They do not normally undertake their own independent fire-risk investigation, nor should they be expected to cure a deficient safety case. They rely on the applicant’s Battery Safety Management Plan, Fire and Rescue Service comments, Environmental Health input, Environment Agency or drainage evidence where relevant, expert evidence and local representations. Where the evidence appears complete, consultees raise no objection and safety matters appear capable of being controlled by conditions, generalised fire-risk objections may carry limited weight.
- 11.37 However, Inspectors do not ignore BESS fire risk. Where credible, site-specific evidence shows that a material risk pathway has not been properly assessed, they may give the issue substantial weight. This is particularly important in the current regulatory context, where Fire and Rescue Services are not statutory consultees for BESS, HSE is not usually engaged as a planning-stage assessor of standalone BESS fire

risk, and NFCC guidance remains guidance rather than a binding regulatory code. In those circumstances, the absence of a consultee objection does not necessarily prove that a comprehensive real-world risk assessment has been undertaken.

- 11.38 The Hawkchurch appeal in East Devon is an important example¹⁸. The appeal concerned a proposed 120 MW BESS at Pound Road, Hawkchurch, in a rural but energy-infrastructure-influenced location close to a substation and solar farm, but also with nearby residential receptors, public rights of way and a sensitive groundwater/aquifer context serving local homes. One of the main issues was whether there was sufficient information on health and safety measures and whether there would be significant risk to local residents and the environment. The Inspector dismissed the appeal, concluding that such risks existed and were significant.
- 11.39 The significance of Hawkchurch is that the Inspector did not reject BESS in principle. He examined the actual characteristics of the proposal, including container separation, compliance with NFCC guidance, emergency access, the ability of fire appliances to approach and operate safely, firefighting water supply, and the risk of contaminated fire-water affecting the environment. He also gave weight to the fact that the Fire Service response did not answer all of the site-specific questions raised by the proposal.
- 11.40 Hawkchurch therefore illustrates the key planning point: an Inspector may have a Fire Service response but still conclude that it does not address the real-world safety questions raised by the particular site. The absence of a Fire Service objection is not necessarily conclusive where it does not grapple with access constraints, layout, water supply, contaminated runoff, nearby receptors or other site-specific consequences. This also explains why Inspector decision-making on BESS fire safety may appear inconsistent: in the absence of a single statutory BESS fire-safety assessment regime, outcomes will depend heavily on the quality of the evidence, the extent of consultee engagement and whether objections are framed as general anxiety or as specific, evidenced planning harm.

¹⁸ Planning Inspectorate, Appeal Ref. APP/U1105/W/23/3319803, Pound Road BESS, Land North East of Axminster National Grid Substation, Pound Road, Hawkchurch, Devon, decision dated 16 February 2024 (appeal dismissed)

Local Communities and BESS Fire and Safety Concerns

- 11.41 Local community concern about grid-scale BESS fire and safety should not be dismissed as mere anxiety, nimbyism, or a misunderstanding of renewable energy. In many cases it is a rational response to a form of infrastructure that is technically complex, rapidly expanding, and still poorly understood by the public. For most local residents, a BESS is not experienced as an abstract component of the energy transition, but as a large and visually uncompromising compound of electrical equipment, lithium-ion batteries, transformers, security fencing, lighting, access tracks and emergency-management assumptions placed into a familiar local landscape, sometimes close to homes, farms, public rights of way and rural businesses.
- 11.42 There is also an almost visceral dimension to public concern. BESS brings together two hazards that both individually and collectively alarm people instinctively: high-voltage electricity and fire. In public perception, those risks are then compounded by the uncomfortable interaction between fire and water. Residents hear that lithium-ion battery fires may involve thermal runaway, toxic smoke, prolonged burning, possible re-ignition, and large volumes of water for cooling or containment. They may also hear that contaminated fire-water must be contained and that in some incidents a “controlled burn” may be the operational strategy. Even where the statistical likelihood of a major incident is low, the perceived consequence is severe, unfamiliar and difficult to visualise. That makes the fear qualitatively different from concern about ordinary construction nuisance or landscape change.
- 11.43 This concern is intensified because most local communities do not possess the technical knowledge needed to interrogate a Battery Safety Management Plan, and the risks posed by grid scale BESS. They are therefore placed in a difficult position. They may be told that the scheme is safe, that consultees have no objection, or that matters can be dealt with by condition, but they lack the technical tools to test whether those assurances are complete. That does not make their concerns invalid. On the contrary, it underlines the importance of transparent, independent and site-specific assessment.
- 11.44 The difficulty is that the current system can make communities feel that their deeply ingrained knowledge of the locality has been overlooked. Residents may know that a lane is actually narrower than shown on a plan, that forward visibility is poor, that a property has vulnerable occupants, that horses are kept close to the site, that a small business brings visitors to a supposedly “residential” receptor, or

that watercourses and drainage behave differently in practice from the way they appear on a desktop plan. Yet if the applicant's assessment is based principally on desk-based information, and if consultees respond only within narrow technical remits, this local evidence may be downplayed as anecdotal rather than treated as an essential part of the real-world risk picture.

- 11.45 This is particularly important because BESS fire and safety risk is not uniform. It depends heavily on the site context: proximity to receptors, access constraints, surrounding land uses, drainage, water supply, wind direction, evacuation practicality and the vulnerability of those nearby. The following point cannot be stressed enough: a real-world risk assessment captures actual site conditions, including sensitive receptors, drainage and access constraints, whereas a desk-based or battery-focused assessment may rely on generic assumptions and overlook non-standard or mixed uses.
- 11.46 Communities may also feel that the evidential burden has been subtly reversed. Instead of the applicant having to demonstrate, positively and transparently, that the development would be safe in its specific location, local residents may feel required to prove that it is unsafe. That is an unfair and unrealistic position. The technical evidence is controlled largely by the applicant and the regulatory framework is fragmented. In that context, public concern is not simply emotional opposition. It is often a response to an accountability gap.
- 11.47 The planning system should therefore treat community concern about BESS fire and safety with care. Generalised fear cannot, by itself, justify refusal. But nor should fear be dismissed where it points to credible, site-specific risk pathways that has not been properly assessed. The proper question is whether the community concern reveals something material about the site that the technical submissions have failed to capture: a receptor too close to the boundary, a constrained access route, an unassessed use, a vulnerable water environment, or the practical impossibility of evacuation in a fire scenario.

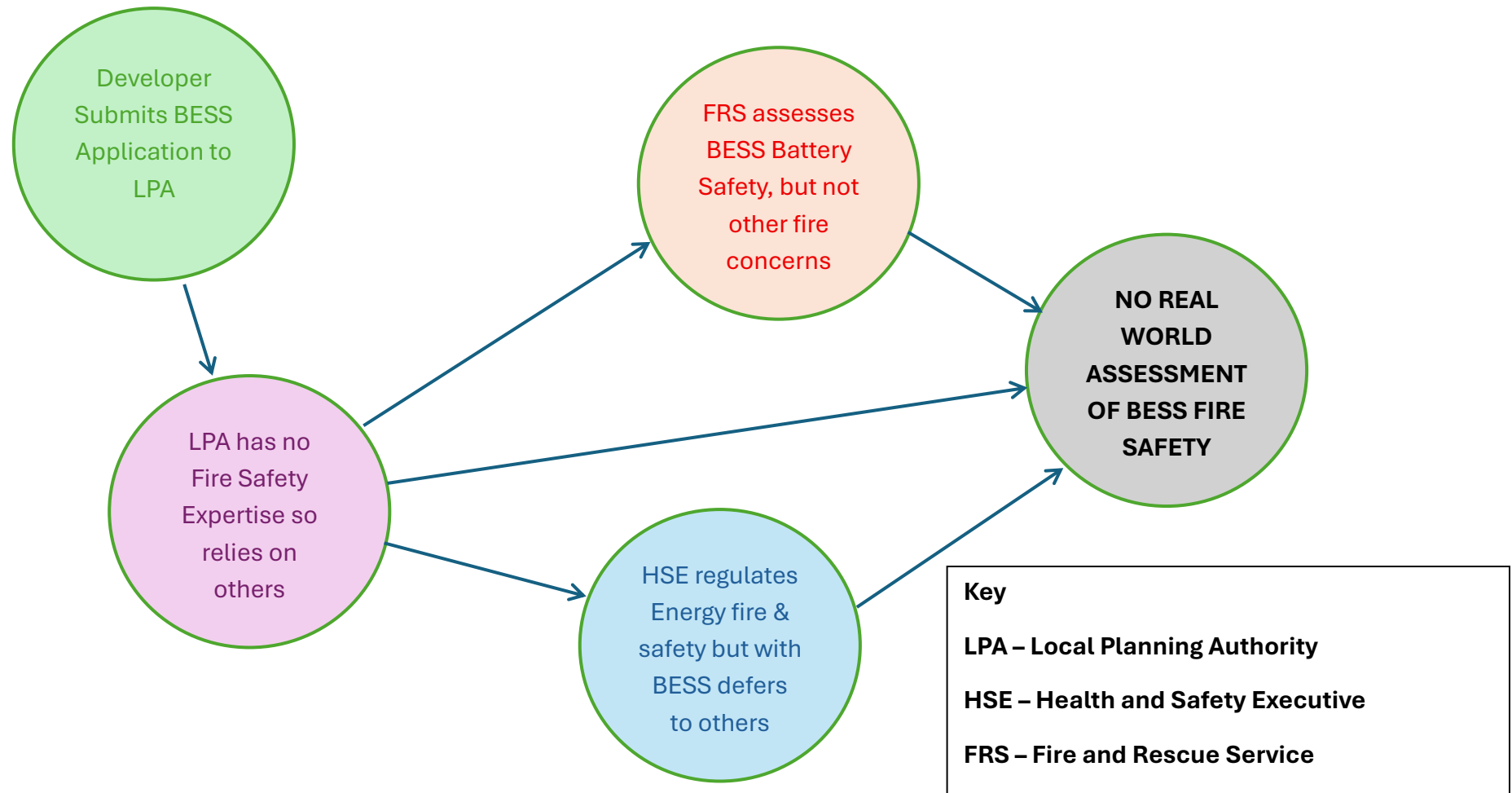
The Combined Effects

- 11.48 The combined effect of these factors is a system in which responsibility for safety assessment is diffuse and, in some respects, indeterminate. LPAs are required to make decisions on technically complex matters without specialist expertise. Fire and Rescue Services

provide valuable but limited advisory input. Developers supply the primary evidence base, but without independent verification. Meanwhile, no national regulator is tasked with bringing these elements together into an accountable process.

- 11.49 This creates regulatory vacuum in which site-specific hazards, particularly those relating to proximity, are not fully identified, safety assessments are not subjected to rigorous external scrutiny, and decisions are made on the basis of incomplete understanding of real-world conditions.
- 11.50 As Diagram 2 overleaf makes clear, no party takes responsibility for a full, independent ‘real world’ risk assessment. Overall, this creates a clear void in the system. Developers are largely left to define and assess their own risks, and existing guidance has not kept pace with the scale and siting of modern BESS schemes. The result is a process that can give a false sense of safety, despite the absence of any comprehensive, real-world assessment of fire and hazard risks.

Diagram 2: The BESS Fire and Safety Hazard Risk Assessment Void



12. Conclusions

- 12.1 There may, of course, be no immediate issue. Most BESS schemes will not suffer a major fire event, and the technology has an undeniably important role to play in the transition to a low-carbon energy system. But there is an important question: whether the present system is capable of anticipating low-probability but high-consequence events before they occur, rather than learning from them afterwards.
- 12.2 Historically, new technologies have often acquired their safety “guard rails” only after serious incidents exposed weaknesses in design, regulation or oversight. That may have been the pattern with the early railways, the motor car and many other forms of infrastructure, but it is not a model that should be accepted for modern grid-scale energy storage. The purpose of regulation should be to anticipate credible failure pathways, test consequences in real-world conditions, and ensure that safety is demonstrated rather than assumed. There may be no simple institutional solution: HSE has not been given a defined planning-stage role for BESS fire and hazard safety; Fire and Rescue Services are not statutory consultees and may understandably be reluctant to move beyond operational response advice; and Local Planning Authorities often lack the specialist expertise, resources and technical framework needed to resolve complex hazard questions. The difficulty is therefore structural rather than attributable to any one body.
- 12.3 However, the consequences are clear. The UK is lagging behind a number of other jurisdictions in confronting the issue directly. In parts of the United States and Australia – as well as the EU - BESS fire safety is more explicitly codified, with greater emphasis on hazard analysis, site context, sensitive receptors, emergency response, test evidence and approval by competent fire-safety authorities. By contrast, the UK remains heavily dependent on applicant-led documentation, non-statutory guidance and fragmented consultation responses.
- 12.4 This becomes less credible as BESS schemes become larger, more numerous and more frequently located close to sensitive uses. The issue is not whether BESS should be supported - it should – but whether public confidence, planning legitimacy and safety assurance can be maintained without a clearer, more independent and more site-specific system of scrutiny. The central conclusion of this report is therefore that the current framework requires reform. At a minimum, it should provide clearer accountability, updated national guidance, independent validation of safety assessments, and a more explicit requirement to assess the real-world context of each site. Far better to anticipate the conditions in which a major incident could occur than to examine, after the event, what could and should have been foreseen.

13. Next Steps

- 13.1 This report has not been written to support an argument against Battery Energy Storage Systems in principle. Grid-scale BESS will be an essential part of the transition to a low-carbon energy system. The issue is not whether such infrastructure is needed, but whether the present system for assessing its fire and hazard safety has kept pace with the scale, speed, duration and changing siting characteristics of modern BESS development.
- 13.2 The central conclusion of this document is that there is a glaring gap in the current framework. The evidence it presents is that no single responsible body appears to be required to undertake a comprehensive, independent, site-specific assessment of how a major BESS fire or hazard incident would play out in the real world, within a current system that relies heavily on developer-led safety documentation, non-statutory guidance, advisory input from Fire and Rescue Services, general health and safety duties, and local planning judgement.
- 13.3 Each of those elements clearly has substantial value, but neither do they individually or collectively act as a substitute for a clearly accountable mechanism for testing fire and hazard risk in the actual location proposed, with the actual receptors, access constraints, water-supply issues, evacuation difficulties, animal-welfare implications and emergency-response realities that exist on the ground?
- 13.4 This has to be the core concern. BESS fire and hazard safety cannot be assessed adequately by asking only whether the battery technology is compliant, whether a Battery Safety Management Plan has been submitted, or whether a Fire and Rescue Service has raised no objection. Those may be entirely relevant considerations, but they do not necessarily answer the more important planning and public safety question: what would happen if a credible major incident occurred at this particular site, in this particular setting, and close to these particular receptors?
- 13.5 That is a distinction that really matters. A BESS located in an industrial or energy-infrastructure environment, with engineered access, controlled land uses, trained personnel and substantial separation from sensitive receptors, may present a materially different risk profile from a large or long-duration BESS located close to homes, rural businesses, livestock, equine uses, public rights of way or constrained rural

roads. The same battery technology may have very different consequences depending on where it is placed. The current system does not appear to require that difference to be examined with the consistency, independence or rigour that the issue demands.

- 13.6 The risk is therefore not simply one of technical failure, it is one that embodies the habitually catastrophic “institutional false reassurance” . A developer may produce a detailed safety plan; the Health and Safety Executive may not be formally engaged (or chooses not to); the Fire and Rescue Service may give a limited or advisory response; and - “bingo!” - the Local Planning Authority may then happily infer that safety is Yet, in reality, no one body has taken ownership of the full, receptor-based, real-world hazard assessment that should be central to decision-making, surely something the system should demand.
- 13.7 That is an entirely unsatisfactory position for developers, local planning authorities, Fire and Rescue Services, local communities and decision-makers alike. It leaves too much uncertainty about who is responsible for what. It also risks placing Local Planning Authorities in an impossible position: either approve a grid-scale BESS scheme on the assumption of the acceptability of technically complex fire, explosion, toxic gas, contaminated water and emergency-response issues without a clear statutory safety arbiter; or refuse the scheme without the evidence that this would be an appropriate decision in the circumstances, something that Local Planning Authorities are understandable extremely reluctant to do.
- 13.8 The purpose of this report is therefore to point to the need for action. Some ideas for the possible form of actions to be taken are set out below, but these are not presented as final answers, merely pointers. They would require proper professional development by Government, regulators, Fire and Rescue Services, the Health and Safety Executive, industry specialists, insurers, local planning bodies and other competent authorities. The immediate need is not to determine the ultimate solution but to recognise that there is an issue and to act on it.
- 13.9 Several possible routes could be considered.
- 13.10 Firstly, Fire and Rescue Services could be given a formal and clearly defined role in the planning assessment of grid-scale BESS. This would not mean expecting FRS bodies to become the sole regulators of BESS safety, nor would it be fair to place an unfunded or unrealistic burden on them. However, their operational knowledge is indispensable. They understand access, water supply, defensive firefighting, exclusion

zones, incident command, evacuation constraints and the practical reality of responding to fires in particular localities. That expertise should not sit at the edge of the planning process as an optional or informal input.

- 13.11 Secondly, the Health and Safety Executive could be given a clearer oversight role for grid-scale BESS, particularly for larger, long-duration or higher-risk schemes. The HSE is not currently functioning as a defined planning-stage safety regulator for ordinary standalone BESS applications. That absence of engagement should not be mistaken for reassurance. A more formal HSE role could help ensure that safety-critical assumptions are independently interrogated and that local planning authorities are not left to resolve specialist hazard questions without expert support.
- 13.12 Thirdly, both HSE and Fire and Rescue Services could be made statutory consultees for grid-scale BESS applications, at least above specified thresholds or where proposals are close to sensitive receptors. This would help bring consistency to a process that currently appears variable and dependent on local practice. It would also make clear that the absence of comment, or a narrow operational response, should not be treated as equivalent to a positive finding that the development is safe in its real-world context.
- 13.13 Fourthly, the Government could consider new legislation or regulations specifically addressing grid-scale BESS fire and hazard safety. This might involve a bespoke BESS safety regime, a statutory safety-case model for larger schemes, mandatory independent validation of Battery Safety Management Plans, or clearer duties on developers to demonstrate site-specific safety before consent is granted. Another possible route would be to translate relevant Fire Chiefs guidance into binding regulation, so that key safety expectations are no longer merely advisory but form part of a consistent national baseline.
- 13.14 Fifthly and finally – and pending wider legislative reform - Fire and Rescue Services and planning authorities could consider early adoption of a structured Grid-Scale BESS Fire and Hazard Assessment Matrix. Annex B sets out possible ideas for what such a matrix might contain. These ideas are offered only as the thoughts of a lay person who has examined the issue through the lens of a real planning case. They would plainly need to be tested, refined and developed by properly qualified professionals. However, the broad principle is important: there should be a systematic way of examining matters such as separation distances, sensitive receptors, animal welfare, access, road widths, water

supply, contaminated runoff, plume behaviour, explosion risk, exclusion zones, evacuation practicality, re-ignition risk, cumulative risk and the credibility of proposed mitigation.

- 13.15 Such a matrix would not be a substitute for regulation, nor should it ever be seen as a tick-box exercise. Its value would lie in forcing the right questions to be asked consistently and visibly. It would help distinguish between generic assertions of safety and a genuine assessment of how a BESS incident might unfold in its actual physical and human environment. It would also assist local planning authorities, elected members, inspectors and communities by making clear what has been assessed, what has not been assessed, and where uncertainty remains.
- 13.16 The next step should therefore be for responsible bodies to acknowledge the gap openly. Government, HSE, Fire and Rescue Services, local planning authorities, the National Fire Chiefs Council, industry and professional bodies should urgently consider whether the current arrangements are sufficient for the scale of BESS now coming forward. If they are not, reform should not wait for a major incident to expose the weakness.
- 13.17 The solution may ultimately involve a combination of statutory consultees, clearer regulation, enhanced guidance, independent validation, professional assessment matrices and better-resourced local decision-making. The precise answer is for competent authorities to design. The essential point is much simpler: the issue must be recognised, responsibility must be clarified, and the system must move from assumed safety to demonstrated safety. Grid-scale BESS can and should form part of the energy transition, but it must do so within a framework that is not only supportive of deployment, but credible, precautionary, accountable and grounded in the realities of the places where these developments are now being proposed.

Appendix A: The New York BESS Fires 2023 – and the City’s Response

In summer 2023, New York State experienced a cluster of fires at three battery energy storage system facilities in Jefferson, Orange and Suffolk Counties. These incidents were significant not because they caused mass casualties - New York’s later initial findings reported no injuries and no harmful levels of toxins detected - but because they exposed public concern and regulatory uncertainty around how grid-scale BESS fires should be prevented, monitored and managed.

The three incidents prompted Governor Kathy Hochul, on 28 July 2023, to convene a New York State Inter-Agency Fire Safety Working Group, involving a range of State and National agencies to independently examine the fires and review safety standards for energy storage facilities. The incidents the group examined were:

Location/County	Broad description	Significance
Jefferson County	BESS fire incident in northern New York	One of the incidents that triggered the State-level fire safety review
Orange County/Warwick area	BESS fire at a battery storage facility	Particularly important because Warwick later became a focus of local concern about repeat BESS fire risk and regulatory oversight.
Suffolk County/East Hampton area	A reported “smouldering battery” incident; roads were closed and train service was reportedly stopped for about an hour until the fire was contained	Demonstrated that even a contained BESS incident can have immediate local disruption and public-safety implications.

New York’s response is important in UK planning terms because it was not simply to reassure the public that the incidents were rare. The State created an inter-agency process, commissioned expert review, examined emergency response, air/soil/water data, and moved towards enhanced fire-code recommendations. NYSERDA now describes the working group as developing stronger standards, including independent peer review of code compliance for projects it supports.

The working group’s early recommendations included proposed improvements to the fire code, emergency response planning, local fire department training, and independent review of project permit packages. These recommendations were aimed particularly at lithium-ion BESS above 600 kWh, including outdoor and grid-scale systems. The planning lesson is that the 2023 New York fires did not prove that BESS is unacceptable. Rather, they showed that where fires do occur, they raise issues going beyond battery design alone: emergency response, public communication, environmental monitoring, local confidence, fire-code adequacy and independent scrutiny. That is why New York’s response is useful as a comparator: it illustrates a more regulator-led, incident-led approach than the more fragmented UK model, where BESS fire safety is often left to developer documentation, local Fire and Rescue Service consultation, and planning judgement.

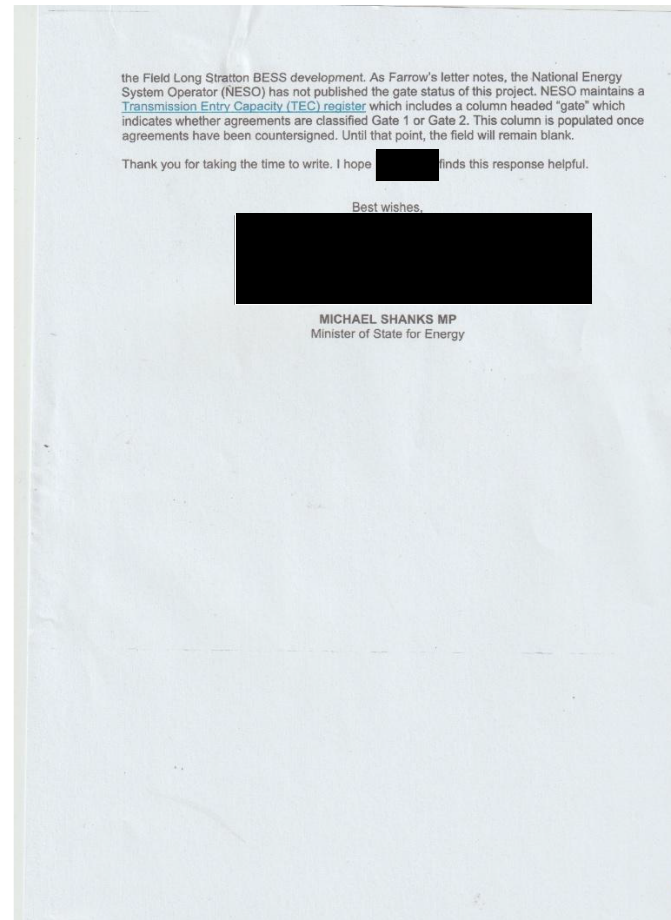
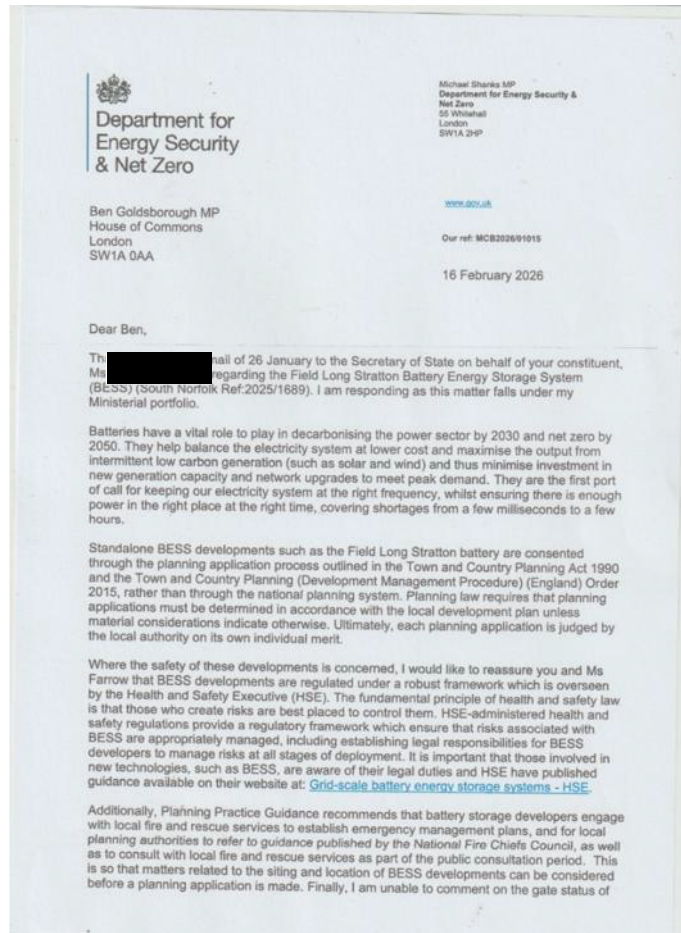
The BESS Laid Plans – What Could Possibly Go Wrong? Systemic Regulatory Gaps in Fire and Hazard Safety Oversight of Grid-Scale Battery Energy Storage Systems

Appendix B: Comparison between the EU/Northern Ireland and Great Britain in relation to BESS fire and hazard safety

Issue	EU/Northern Ireland position	Great Britain position	Significance for BESS fire safety
Recognition of stationary BESS as a distinct regulatory category	Regulation (EU) 2023/1542 expressly recognises stationary battery energy storage systems and includes specific safety provisions for them. Article 12 requires such systems placed on the market or put into service to be safe during normal operation and use	Great Britain does not currently have an equivalent BESS-specific product safety regime applying directly to stationary BESS. The framework is dependent on general health and safety law, electrical safety duties, planning control, NFCC guidance, and developer-led submissions	The EU position at least starts from the proposition that stationary BESS safety is a discrete regulatory issue. Great Britain still treats BESS safety through a fragmented collection of broader regimes
Technical documentation and safety testing	EU rules require technical documentation to demonstrate compliance with safety requirements and include evidence of testing against relevant safety parameters, including hazards such as fire or explosion where applicable	In Great Britain, safety information is generally provided through applicant-led Battery Safety Management Plans and supporting technical material, without a consistent statutory requirement for independent validation at the planning stage	This creates a difference between a more formal product-conformity model and a planning-led model in which much depends on the completeness and robustness of developer material
Application within the United Kingdom	The EU Batteries Regulation applies in Northern Ireland under the Windsor Framework. The UK Government's own product-regulation guidance states that conformity assessment for batteries is not required in Great Britain, only in Northern Ireland where Regulation (EU) 2023/1542 applies directly	England, Scotland and Wales are outside the direct application of that EU battery regime	A higher and more contemporary battery regulatory standard therefore applies in one part of the UK than in mainland Great Britain
Site-specific fire and hazard assessment	The EU regime does not itself provide a full planning-stage assessment of local circumstances such as access, water supply, toxic plume behaviour, proximity to sensitive receptors, animal welfare, evacuation constraints or Fire and Rescue Service intervention.	Great Britain also lacks a consistent statutory mechanism requiring an independent, site-specific, real-world fire and hazard assessment at the planning stage.	Both systems have limits, but the weakness is more acute in Great Britain because it lacks both a BESS-specific product safety regime and a mandatory site-specific fire safety approval process.

Issue	EU / Northern Ireland position	Great Britain position	Significance for BESS fire and hazard safety
Role of independent verification	EU conformity and technical documentation requirements create a more formal route for demonstrating battery safety compliance.	Great Britain does not consistently require independent testing of developer assumptions, validation of Battery Safety Management Plans, or verification that all relevant site-specific risks have been identified.	The GB approach risks becoming, in practice, a form of informed reliance on developer assurance rather than independent safety scrutiny.
Fire and explosion hazards	Article 12 and associated technical documentation requirements require relevant safety parameters to be addressed and hazards such as fire or explosion to be considered where they may arise.	Fire and explosion issues may be addressed through NFCC guidance, Fire and Rescue Service comments and developer documentation, but these routes are not equivalent to a binding BESS-specific safety-case regime.	The EU framework gives fire and explosion risk a clearer regulatory foothold, while GB remains more dependent on non-statutory guidance and local interpretation.
Planning-stage implications	EU product safety compliance may support confidence in the battery system itself, but it does not remove the need for separate assessment of the particular site and its surroundings.	In GB, LPAs may be left to determine public safety acceptability without a specialist statutory BESS safety regulator or mandatory independent safety-case approval.	The key planning question remains unresolved in GB: who independently verifies that a large BESS is safe in its actual location, with its actual surrounding receptors?
Position in relation to sensitive receptors	The EU regime does not directly resolve receptor-based planning issues, such as nearby homes, businesses, livestock, schools, care uses, public rights of way or constrained access routes.	GB guidance and planning practice do not consistently require real-world receptor identification and assessment, and LPAs may rely on desk-based or developer-led information.	This is especially important where BESS schemes are becoming larger, longer-duration and closer to sensitive receptors.
Overall conclusion	The EU / Northern Ireland framework is not a complete fire and hazard safety regime for BESS, but it is more modern and more explicit in recognising stationary BESS safety as a regulatory issue.	Great Britain's framework remains comparatively underdeveloped, fragmented and overly dependent on applicant-led assurance, non-statutory guidance and local planning judgement.	The contrast reinforces the report's central argument: Great Britain has not yet put in place the regulatory guard rails needed for the scale, duration and siting pattern of modern grid-scale BESS.

Appendix C: Letter from Michael Shanks MP, Minister of State for Energy, to Ben Goldsborough MP re BESS Fire Safety Issues, February 2026



The BESS Laid Plans – What Could Possibly Go Wrong? Systemic Regulatory Gaps in Fire and Hazard Safety Oversight of Grid-Scale Battery Energy Storage Systems

Annex A Explained

Annex A is included to show how the issues identified in the main body of this report arise in practice. The report is principally concerned with a national and systemic question: whether the current UK framework provides a sufficiently clear, independent and site-specific mechanism for assessing fire and hazard safety risks associated with grid-scale BESS. Annex A then tests that question against recent experience in South Norfolk.

The Annex is in three related parts. Annex A1 examines responses of Norfolk Fire and Rescue Service to a number of recent BESS applications in South Norfolk. It is not intended as a criticism of the service, but as an illustration of the limited and largely standardised nature of the fire service role within the current planning process. In particular, it highlights the extent to which responses may focus on Battery Safety Plans, access and operational matters, rather than a wider “real world” assessment of surrounding receptors, fire consequences and site-specific hazard pathways.

Annex A2 then considers the Field Long Stratton BESS proposal, South Norfolk application 2025/1689, as a specific case study. This is a large-scale proposal in close proximity to Merryfield Stud, a nearby sensitive receptor involving residential occupation, equine use and visiting members of the public. The purpose of the case study is not simply to rehearse a local objection, but to demonstrate how the wider regulatory gap can become acute where a BESS is proposed close to complex, mixed-use receptors and where no body appears to have undertaken a comprehensive independent fire and hazard safety assessment.

Annex A3 provides illustrative major-fire scenarios for a long-duration, assumed eight-hour, 400 MW BESS. These scenarios are not predictions, nor are they advanced as evidence that such an incident is likely at this particular site. Their purpose is to illustrate the nature of the consequences that ought to be considered in any credible real-world assessment: thermal runaway, potential escalation, toxic smoke or gas release, prolonged fire duration, emergency access, evacuation difficulties, animal welfare implications and impacts beyond the red line boundary.

Taken together, the Annexes are intended to move the discussion from the abstract to the practical. They show how a framework that appears adequate at the level of policy, guidance and institutional responsibility may fail to produce a clear answer to the most important planning question: has the proposal been independently assessed in its actual location, with its actual receptors, access constraints and emergency-response realities, and has it been demonstrated to be safe for its lifetime?

Annex A1: Norfolk Fire and Rescue Services and their response to BESS applications

About Norfolk Fire and Rescue Services

- A 1.1** Norfolk Fire and Rescue Service is the statutory fire and rescue service for the county of Norfolk and forms part of Norfolk County Council, which is the fire and rescue authority. It operates across one of England’s largest and most rural counties, with dispersed settlements, extensive road and inland water networks, coastal risks, an ageing population profile and a growing renewable energy and energy-storage sector. Its current strategic planning context is therefore shaped not only by conventional fire response, but also by road traffic collisions, water rescue, extreme weather, flooding, wildfire, medical co-response, major incidents and emerging technological risks, including lithium-ion batteries, electric vehicles and battery energy storage systems.
- A 1.2** The Service’s latest HMICFRS¹⁹ inspection, published in March 2024, recorded a mixed but improving picture. Inspectors found Norfolk Fire and Rescue Service to be good at understanding risk, responding to major and multi-agency incidents, and ensuring the affordability of its services. It was assessed as adequate in protecting the public through fire regulation, responding to fires and other emergencies, making best use of resources, promoting values and culture, and ensuring fairness and diversity. However, it still required improvement in preventing fires and other risks, getting the right people with the right skills, and managing performance and developing leaders. The previous “cause for concern” in relation to prevention had been removed, indicating progress, but the overall picture remains one of an improving service with continuing areas requiring development.
- A 1.3** For 2025/26, Norfolk Fire and Rescue Service has an agreed net revenue budget of approximately £39.8 million, an increase of 10.5% on the previous year. Staffing costs represent the vast majority of expenditure, with around 84% of the budget allocated to staffing and firefighter staff costs forming 79% of the total. Using HMICFRS’s published 2024/25 staffing rate of 0.90 workers full-time equivalent per 1,000 population, and Norfolk’s 2024 resident population of approximately 940,359, this equates to about 846 FTE workers.

¹⁹ His Majesty’s Inspectorate of Constabulary and Fire & Rescue Services

- A 1.4** Operationally, the Service has 42 fire stations, most of which operate on an on-call model, and 51 fire appliances, supported by specialist assets including aerial ladder platforms, environmental protection units, water carriers, a high-volume pump, water rescue boats and one of the national Urban Search and Rescue teams. Its Community Risk Management Plan 2026–2031, approved in March 2026, sets out the intended approach to matching resources to risk, strengthening prevention and protection, responding to emergencies, adapting to climate and emerging risks, supporting staff, improving fire stations, and developing partnership working across public services.

Renewable energy infrastructure and NRFS's growing exposure to the technological elements of such investment

- A 1.5** Norfolk has already received a substantial share of renewable and low-carbon energy infrastructure and continues to be a major focus for further investment. This is not therefore a county with little or no exposure to the energy transition. Its North Sea frontage, ports, grid connections, large rural land area and proximity to existing and planned transmission infrastructure mean that Norfolk has become one of the principal areas in England for offshore wind, solar generation, substations, grid reinforcement and battery energy storage.
- A 1.6** Existing offshore wind assets such as Sheringham Shoal and Dudgeon have already made the Norfolk coast part of the operational renewable energy landscape, while the Norfolk Vanguard and Norfolk Boreas offshore wind zone, now owned by RWE, represents a further very substantial planned investment. RWE describes the three Norfolk offshore wind projects as each having a capacity of around 1.4 GW, with the shared onshore cable route already under construction and offshore construction expected to begin in 2027.
- A 1.7** The pattern is not confined to offshore wind. Norfolk is also seeing major proposed and emerging investment in solar farms, battery energy storage systems, substations, converter stations, grid connections and associated port and operations infrastructure. Norfolk County Council's own NSIP material refers to large-scale solar development in the county, including proposals involving solar generation, a new 400 kV substation, converter stations and battery storage. South Norfolk and Broadland Council has also recognised in planning policy work that South Norfolk is "quickly becoming a focus" for energy generation, storage and transmission projects, including solar farms, battery storage, substations and powerlines. In Great Yarmouth, public investment is also being directed towards offshore wind support infrastructure, including the £28 million offshore wind hub project, with quay refurbishment, a new pontoon for crew transfer vessels and upgraded shore infrastructure.

- A 1.8** This context is important when considering the role of Norfolk Fire and Rescue Service. Unlike some other parts of the country, Norfolk is not encountering renewable energy infrastructure as an isolated or occasional planning issue. It has seen, and continues to see, a concentration of renewable energy and associated grid infrastructure. In those circumstances, it is reasonable to assume that Norfolk Fire and Rescue Service is developing a growing institutional understanding of the operational fire and hazard safety risks associated with renewable energy infrastructure, including lithium-ion batteries, electric vehicles and battery energy storage systems. As already identified, that does not of course mean that the Service has a statutory planning-consultee role equivalent to a specialist safety regulator, nor that every individual proposal has been subject to a comprehensive site-specific hazard assessment.
- A 1.9** However, it does mean that NFRS is operating in a county where these risks are increasingly foreseeable, recurring and material to emergency planning. Its own Community Risk Management Plan process expressly identifies emerging risks such as lithium-ion batteries, electric vehicles and battery energy storage systems as matters of public concern, and the national fire sector now has specific NFCC guidance on grid-scale battery energy storage planning. Against that background, NFRS's engagement with renewable energy proposals should be understood as taking place within a growing body of local operational experience and national sector guidance.

Critique of NFRS responses to a recent BESS applications in South Norfolk

“This does raise the highly relevant question that if faced with a large grid scale BESS proposal next door to - say - an NHS maternity unit, or maybe a 30 place residential care home or then again a children’s soft play centre, would NFRS would make a formal objection to that proposal? If the answer is yes, why then would it fail to object – as it has – to a BESS proposal detailed as a case study below, with a boundary only 15 metres from sensitive receptors comprising a domestic property, an equine use and a hairdressing business as has happened in South Norfolk? And how concerning would it be if faced with a BESS next door to a residential care home etc, NFRS declined to object because “it is not our responsibility to undertake real world assessment of BESS?” (Paragraph A.18)

A1.10 Table A below summarises recent responses NFRS has provided for a number of grid scale BESS applications in South Norfolk.

Name of Scheme	Site area/capacity/no. of battery containers	NFRS Comments
Land N of Hickling Lane Swainsthorpe	3.48 ha/114MW 176 containers	Advise that a Fire Risk Assessment be developed in accordance with a number of recommended guidelines (advised in consultation).
Land N of Stoke Lane Dunston	2.1 ha/130MW 30 containers	A generic statement that all BESS installations should be subject to a suitable Fire Risk Assessment, supported by fire testing where necessary. The fire strategy should be agreed early with insurers and tailored to the specific installation, taking account of battery type, location, layout, construction, system importance, property-loss and business-interruption risks. Controls should be multilayered, combining good design, prevention of thermal runaway, early detection, automatic suppression, and adequate manual firefighting provision, including appropriate water supplies
Mangreen Hall Lane	0.49 ha/MW Not stated 26 containers	None received
Mangreen Hall Lane	34ha 400MW 170 containers	15 ' <i>points to be placed on this application</i> ' (sic) – in other words not an objection - largely regarding the internal operation of the BESS plus adequate water supply for firefighting and an alternative emergency access
Field Long Stratton – original application June 2025	19.32 ha 400MW 876 containers	NFRS response appears to comprise a set of broadly standard or “boilerplate” pre-commencement conditions for BESS developments, rather than a bespoke assessment of the particular circumstances of the application
Field Long Stratton (as revised December 2025)	As above, but now a Long Duration BESS	No objections following meeting with the developer, with NFRS noting the operation of the site as a LDES will not change the originally proposed battery technology or capacity. Noted also that the new layout makes the BESS more compact and ' <i>and therefore increases the distance to the nearest buildings</i> '

A 1.11 A review of these responses to recent BESS applications in South Norfolk suggests an inconsistent, limited and largely process-driven approach to fire and hazard safety. The responses vary from no comment at all, to generic advice that a Fire Risk Assessment should be prepared, to standardised lists of matters to be addressed by the developer, to acceptance of developer assurances following discussion.

What is largely absent across the examples is any clear evidence of a consistent methodology for assessing the actual fire and hazard risks of each site in its real-world context.

- A 1.12** This is significant because the applications listed differ materially in scale, layout, capacity and local setting. They range from relatively small schemes to very large grid-scale proposals, including the Field Long Stratton scheme at 400 MW and, following revision, an apparent Long Duration Electricity Storage BESS. Yet the NFRS responses do not appear to demonstrate a proportionate increase in scrutiny where scale, stored energy, proximity to receptors, access constraints or rural location might reasonably require it. In some cases, the response appears to amount to no more than a request that the developer prepare a suitable fire risk assessment or comply with standard mitigation expectations.
- A 1.13** A recurring feature is the use of standardised or “boilerplate” wording. Requirements for risk reduction strategies, emergency response plans, detection systems, suppression systems, water supplies, access arrangements and consultation with NFRS are all relevant, but they are generic safeguards. They do not, in themselves, amount to a site-specific judgement that the development is safe in its particular location. The use of such standardised responses risks creating an impression of scrutiny while leaving the most important planning question unanswered: whether this specific BESS, in this specific location, with these specific surrounding receptors and access constraints, would be capable of being safely managed in the event of a serious incident.
- A 1.14** The Field Long Stratton responses illustrate the problem particularly clearly. The original June 2025 response appears to comprise a standard set of pre-commencement requirements rather than a bespoke assessment of the site. The later January 2026 response following the December revisions accepted, or at least recorded, the developer’s explanation that operation as an LDES site would not change the technology, capacity or fire-load profile, and that the more compact layout would increase the distance to the nearest buildings. It also recorded the developer’s confirmation that two directions of emergency access would be maintained and that access splays would allow fire appliances to enter without reversing or realigning. These are important matters, but the response does not show that NFRS independently tested those assertions against site conditions.

- A 1.15** That is a central weakness. Across the listed examples, there appears to be little evidence that developer assertions have been interrogated in any meaningful way. Statements about access, layout, spacing, water supply and operational management are treated as matters to be confirmed, conditioned or agreed, rather than as assumptions requiring independent verification. In the case of Field Long Stratton, this is especially concerning because access and sensitive receptor issues are not abstract technical matters; they are visible and measurable on the ground. A real-world assessment would be expected to examine road widths, appliance manoeuvring, approach routes, wind direction, evacuation constraints, proximity to dwellings and other receptors, and the likely consequences of a defensive firefighting strategy.
- A 1.16** Nor does the pattern of responses suggest the adoption of a precautionary approach. Grid-scale BESS incidents may be low probability, but they can be high consequence, prolonged, difficult to extinguish, liable to re-ignition and capable of producing toxic smoke and contaminated runoff. Where a proposal is large, rural, close to sensitive receptors or dependent on constrained access, a precautionary approach would require the Fire and Rescue Service to ask whether the submitted information positively demonstrates that the risk can be managed, rather than simply whether the applicant has promised standard safety measures. The responses reviewed do not appear to show that level of precaution.
- A 1.17** The overriding concern is the absence of any evident real-world assessment. This would start with the site and its surroundings, not merely with the battery technology. It would identify nearby homes, businesses, livestock uses, public rights of way, access constraints, water supply limitations, likely exclusion zones, evacuation difficulties and potential plume impacts. It would then test the proposed fire strategy against those facts. The NFRS responses listed do not appear to do this. They focus primarily on internal BESS design, fire suppression, water supply, emergency plans and access in principle, rather than the consequences of a major incident for the receiving environment.
- A 1.18** This does raise the highly relevant question that if faced with a large grid scale BESS proposal next door to - say - an NHS maternity unit, or maybe a 30 place residential care home or then again a children's soft play centre, would NFRS would make a formal objection to that proposal? If the answer is yes, why then would it fail to object – as it has – to a BESS proposal detailed as a case study below, with a boundary only 15 metres from sensitive receptors comprising a domestic property, an equine use and a hairdressing business as has happened in South Norfolk? And how concerning would it be if faced with a BESS next door to a residential care home etc, NFRS declined to object because *“it is not our responsibility to undertake real world assessment of BESS?”*

- A 1.19** Perhaps most strikingly, there is not a shred of evidence from the responses reviewed that any NFRS officer visited any of the listed locations before commenting. That may or may not have happened, but the responses do not record it. They do not refer to observed road conditions, measured access constraints, nearby sensitive receptors, topography, local land uses, evacuation routes, or practical firefighting positions. In the absence of such evidence, it is difficult to see how the responses can be treated as grounded, site-specific assessments of fire and hazard safety.
- A 1.20** This matters because Local Planning Authorities may be tempted to treat the absence of an NFRS objection as equivalent to confirmation that the fire risk is acceptable. The pattern of responses does not support that conclusion. At most, the responses indicate that NFRS has identified generic matters that developers should address, and in some cases has accepted developer assurances about layout, access, spacing and water supply. They do not demonstrate that NFRS has independently assessed the wider hazard consequences of each proposal in its real-world context.
- A 1.21** Accordingly, the recent South Norfolk BESS responses should be treated with caution. They provide useful operational comments, but they should not be elevated into a comprehensive safety endorsement. The key planning issue remains unresolved: whether each proposal has been subject to a robust, independent, site-specific and receptor-based fire and hazard safety assessment. On the evidence of these responses, that has not been demonstrated.

Annex A2: Summary of Field Long Stratton BESS (South Norfolk Application 2025/1689) and a Close Sensitive Receptor (Merryfield Stud) in a wider context of Norfolk Fire and Rescue Service’s unwillingness to engage in real world assessments of BESS proposals in the County

Overview of the Illustrated Scheme

- A 2.1** South Norfolk planning application 2025/1689 relates to land north of the junction of Market Lane and Carr Lane, Great Moulton, Norfolk. The proposal is for the erection of a Battery Energy Storage System (BESS) and associated infrastructure, including access, drainage, landscaping and other incidental works. As of August 10th, 2026, this application has yet to be determined by South Norfolk Council.
- A 2.2** The applicant is promoting the scheme as Field Long Stratton, a grid-scale battery storage project providing up to 400 MW of electricity storage capacity. The application was originally submitted in June 2025 and was subsequently revised in December 2025. The applicant’s own project material describes the December 2025 submission as a package of revised designs and technical reports.
- A 2.3** The significance of the revised scheme is that the project is no longer simply a conventional short-duration BESS in practical planning terms. The December 2025 material presents the project in terms consistent with long-duration energy storage, with a materially different risk, deliverability and environmental profile from a typical 1–2 hour grid-balancing battery. If the 400 MW scheme is treated as an 8-hour long-duration battery, the implied storage capacity would be approximately 3,200 MWh. That would place it among the very largest BESS proposals being advanced in the United Kingdom, and materially above the scale of most local-authority-consented BESS schemes.

Merryfield Stud

- A 2.4** Merryfield Stud, Carr Lane, Great Moulton, is of central importance to the assessment of application 2025/1689. It lies extremely close to the proposed BESS site, with the boundary of the Stud understood to be approximately 15 metres from the red line boundary of the application site. Although the battery containers themselves may be set further back within the site, the proximity of this receptor to the development boundary is a critical planning consideration.

A 2.5 Merryfield Stud is not a simple agricultural holding or an incidental neighbouring land parcel. It needs to be properly recognised as a multiple sensitive receptor, combining:

1. Residential occupation – a single family dwelling
2. Equine use, comprising 6 retired stallions and broodmares stabled on site as family pets
3. A small, ancillary, appointments-only hairdressing business operating within the residential curtilage.

A 2.6 This combination makes the receptor unusually sensitive. It is relevant not only to visual and residential amenity, but also to noise, lighting, landscape impact, emergency planning, evacuation, equine welfare, fire risk, toxic plume risk, access constraints and the practical consequences of a BESS incident.

Planning history of Merryfield Stud

A 2.7 The planning history of Merryfield Stud is important because it confirms that it cannot be dismissed or treated as an inconsequential rural building group. The residential use has been extant since 2006, deemed exempt from any enforcement action in 2013 and formally granted a full planning history through a Certificate of Lawfulness of Existing Use or Development application confirmed by South Norfolk Council on 2 April 2026.

A 2.8 That planning history matters because it confirms the existence of a lawful residential receptor very close to the proposed BESS. The residential use also sits alongside long-standing equine occupation and ancillary domestic/commercial activity. The result is not merely a nearby dwelling, but a receptor whose character and vulnerability should have been plainly identified and assessed in the applicant's submitted documents.

Atypical and highly material failure by the applicant

- A 2.9** The case is atypical because, despite the close proximity and sensitivity of Merryfield Stud, the applicant has consistently failed to identify it properly in the planning documents as a multiple sensitive receptor. That omission is not a minor drafting error. It goes to the reliability of the submitted assessment base.
- A 2.10** A competent assessment of a grid-scale BESS of this size should have identified nearby sensitive receptors at the outset. This is especially so where the site is not a remote industrial location, but a rural edge-of-settlement location with residential, equine and small business activity in close proximity. Merryfield Stud should have been explicitly considered in the Environmental Statement and supporting technical reports, including the assessments of noise, landscape and visual impact, lighting, fire risk, emergency access and residential amenity.
- A 2.11** The failure is particularly serious because as noted above, this this is not a small BESS proposal.

Why Merryfield Stud is central to the planning assessment

- A 2.12** Merryfield Stud is central to the planning assessment for five main reasons.
- A 2.13** First, it appears to be one of the closest, if not the closest, multiple sensitive receptors to a proposed grid-scale long-duration BESS of this scale. That proposition has been framed carefully, because a definitive national comparison would require a full survey of all UK BESS schemes. However, on the information presently available, the combination of very close proximity, lawful residential occupation, equine use and ancillary business activity is highly unusual.
- A 2.14** Secondly, the Stud's equine use materially changes the risk profile. Horses cannot self-evacuate and in addition are highly sensitive flight animals and could be expected to panic in the event of a BESS incident, potentially injuring themselves or their handlers. In an emergency, the owners are likely to attempt to rescue animals, potentially increasing danger to human life. Emergency planning for a BESS fire or toxic plume therefore cannot be limited to a desktop assessment of access tracks, firewater and container spacing. It must address real-world behaviour, vulnerable animals, confined buildings, human response and evacuation practicality.

- A 2.15** Thirdly, the residential use requires proper assessment of living conditions. Noise, vibration, artificial lighting, night-time activity, emergency sirens, construction disturbance, visual enclosure, security fencing and the industrialising effect of the scheme all have to be assessed by reference to the people actually living at Merryfield Stud.
- A 2.16** Fourthly, the ancillary hairdressing use is understood to receive visitors by appointment. That adds a further dimension to receptor sensitivity, because the site is not merely occupied by residents and animals, but may also involve visiting members of the public.
- A 2.17** Fifthly, the omission undermines confidence in the applicant's wider evidence base. If the closest and most complex receptor was not properly identified, it calls into question whether the assessments have been constructed around an incomplete understanding of the site context.

Planning significance

- A 2.18** The planning significance is substantial. A local planning authority is entitled to expect the applicant for a major grid-scale BESS to identify and assess the most sensitive nearby receptors. A consequence of failing to do so is that the application may understate or fail to assess key impacts, and any consent could rightly anticipate legal challenges.

The Failures to date of the relevant authorities to identify the potential real world risk to sensitive receptors are a Significant Concern in themselves

- A 2.19** The issue however goes way beyond than the applicant's failure to identify Merryfield Stud. A genuine "real world" fire and hazard safety assessment by the Fire and Rescue Service should also have identified the receptor. Such an assessment should not have been confined to container spacing, firewater supply, access tracks or a Battery Safety Plan. It would have involved looking at the actual receiving environment: who and what is close to the site, how they would be affected by smoke, toxic plume, explosion risk, evacuation requirements, road closures and prolonged defensive firefighting, and whether the proposed development is compatible with those surrounding uses.

- A 2.20** Had that exercise been undertaken, Merryfield Stud could hardly have been missed. The receptor is physically close, visibly occupied, and plainly relevant to emergency planning. The absence of such recognition by the Fire and Rescue Service is therefore troubling. It illustrates the wider regulatory problem identified in this briefing: a limited or non-objection response from an FRS should not be treated as evidence that site-specific fire and hazard risk has been independently assessed and found acceptable. In this case, the closest and most complex receptor appears not to have been identified through the fire-safety consultation process at all.
- A 2.21** That conclusion is reinforced by the very different approach taken by South Norfolk Council's Environmental Quality consultee. In relation to noise, the Environmental Quality consultee clearly did engage with the local context, identified Merryfield Stud as a sensitive receptor, and objected on the basis of predicted noise impacts on those receptors. That does not mean the noise assessment and fire-safety assessment are the same exercise - they are not. But it does demonstrate something important: where a consultee actually considers the real-world receiving environment, Merryfield Stud would have been identifiable as a material sensitive receptor.
- A 2.22** The contrast is stark. By the simple act of proactively investigating "on the ground" evidence South Norfolk's Environmental Quality consultee identified the receptor and raised an objection on a separate technical issue, namely noise. By contrast, the fire-safety process did not appear to identify the same receptor for the purposes of assessing BESS fire and hazard safety risk. That inconsistency strengthens, rather than weakens, the concern that the fire and hazard safety assessment has not been grounded in the actual site circumstances.

Annex A3: Illustrative major-fire scenarios for a major incident at a Long Duration (assumed 8 hour) 400MW BESS

The following three scenarios illustrate why fire and hazard safety cannot be assessed only by reference to battery-container design or generic mitigation. They are not predictions that any particular incident will occur, but they are plausible planning scenarios which test how the risk profile changes according to the receiving environment.

NFCC guidance on grid-scale BESS generally points towards a defensive firefighting approach: securing adequate water supply, protecting crews, limiting spread beyond the container of origin, and planning for hazardous materials and site-specific risk information, rather than assuming that firefighters will commit to an internal attack on battery containers. This makes the local context, surrounding receptors and access arrangements central to the planning judgement.

Scenarios 1 and 2 cover fire events of escalating severity, but both containable within the BESS facility and both in locations where there are no close sensitive receptors present and where emergency access is satisfactory. Though both events would make national headlines and lead to questioning about the general safety of BESS, almost certainly concerns would in time dampen down and any qualms about BESS safety regimes would ebb away.

Scenario 3 is of an entirely different stamp. Here is a ‘real world’ proposal – Field Long Statton BESS – and an actual receiving environment. Here is also a credible fire event. The consequences could be potentially catastrophic – and, like Grenfell Tower – would lead to an agonised debate over why such an outcome wasn’t predicted.

Scenario 1: Contained event - single-container thermal runaway, no spread²⁰

Trigger: one container suffers battery-module thermal runaway, possibly arising from an internal defect, overheating, electrical fault, or battery management system / cooling failure.

Event development: gas venting, smoke, flame and a localised fire occur. Fire detection and electrical isolation operate as intended. Adjacent units are separated sufficiently and are cooled or otherwise protected. The fire remains within the container or the immediate bay.

²⁰ This would be akin of the 2020 Carnegie Road Liverpool BESS fire (see 10.7)

Heat-release intensity: potentially tens of MW, with a severe single-container peak possibly around 50-100 MW or more, but not a site-wide event.

Real-world comparison: broadly comparable to a major HGV fire, or possibly a single large tanker or pool-fire scale event, but spatially limited.

Outcome: site evacuation, defensive firefighting, hazardous-materials response, smoke plume monitoring, firewater containment and later forensic investigation. In planning terms, this is the developer's best-case major incident: serious but contained.

Scenario 2: Burn-out event - major fire, but good access and no close receptors²¹

Trigger: thermal runaway spreads to several containers, or one block or row becomes involved.

Event development: the Fire and Rescue Service adopts a defensive strategy. Crews do not enter the hazard zone. They protect neighbouring containers, manage smoke and water run-off, and allow the affected units to burn out. Access roads, turning heads, water supplies and isolation systems all work as designed.

Heat-release intensity: plausibly 100-400 MW average, depending on how many containers are involved and over what duration. A full 400 MW / 8-hour energy release would equate to a 400 MW thermal average if released over eight hours, or approximately 133 MW if spread over 24 hours.

Real-world comparison: one petrol tanker fire is often treated in fire-engineering terms as around 200-300 MW, so this type of event could be comparable to one or more tanker-scale fires but potentially sustained for much longer.

Outcome: serious but operationally manageable. There is no immediate residential or equine receptor. Smoke plume may still affect the wider area, but there is space for cordons, appliances, water relay, drone or thermal monitoring and evacuation if required.

Scenario 3: Merryfield Stud/Carr Lane nighttime scenario - major fire plus receptor and access failure

Trigger: thermal runaway begins at night and escalates before full human awareness. Smoke, flame, popping or venting noises, alarms or emergency lighting become apparent.

²¹ This would be an event similar to the January 2025 Moss Landing Fire (See 10.5)

Event development: wind carries smoke, noise and light towards Merryfield Stud and Carr Lane. Horses panic. Owners attempt emergency evacuation or containment. Vehicles, horseboxes, loose horses, residents, responders or bystanders obstruct Carr Lane. A narrow rural lane becomes partially or wholly blocked.

Heat-release intensity: even if only part of the site is involved, a multi-container event could plausibly reach 100-400 MW average heat release, with local radiant heat, smoke and toxic-gas risk. If propagation is not controlled, the duration may extend from hours into days.

Real-world comparison: this is not simply “a fire”. It is closer to trying to manage one or more petrol-tanker-scale fires beside a vulnerable rural receptor, at night, with animals panicking and emergency access compromised.

This scenario is materially worse because the hazard is no longer confined to the battery site. It becomes a combined incident involving:

- fire and thermal runaway;
- toxic smoke and hazardous-materials consequences;
- frightened horses and animal-welfare risk;
- disorientated residential occupants and potential visitors;
- blocked or compromised emergency access;
- night-time evacuation pressure;
- a constrained rural highway environment; and
- potential delay or complication in Fire and Rescue Service deployment.

The difference between Scenario 2 and Scenario 3 is not the chemistry of the battery; it is the receiving environment. A BESS fire that might be defensible on an isolated industrial site or in a remote location with no sensitive receptors and good highway access becomes materially different when placed close to a residential equine receptor, on a constrained rural lane, where night-time panic, horse movements and blocked access could turn a technical fire event into a multi-agency life-safety incident.

Annex B: A Putative “Real World” BESS Fire & Hazard Risk Assessment Matrix

Disclaimer: *This matrix is an indicative discussion document only. I have no professional qualifications and experience relating to BESS fire and safety hazard and the matrix has not been developed with the assistance of fire engineers, battery scientists or Fire and Rescue Services. It is intended solely to stimulate discussion about how a structured, transparent and proportionate risk-screening framework might assist planning consultations.*

Purpose

The matrix is intended as an initial screening tool for Fire and Rescue Services during planning consultations. It is not designed to determine whether a scheme is safe. Instead it seeks to identify BESS projects where the combination of scale, technology, location and emergency response complexity suggests that additional investigations may be warranted.

The matrix relates purely to matters of verifiable fact, not subjective determination. All the data required should be easily accessible from public data, onsite inspection, or the planning application to which the matrix is being applied.

Suggested Risk Assessment Matrix

Section A – Intrinsic Fire Hazard

This would involve a comparative assessment of risk - looking at the BESS characteristics alone before locational criteria are applied - on the basis that intrinsic risk will vary depending on the scale and nature of the BESS.

Factor	Low (Score)	Medium (Score)	High (Score)	Score Range
Installed Energy Capacity MWh)	<200 (0)	200–1000 (5)	>1000 (10)	0–10
Duration	<2 hr (0)	2–4 hr (5)	>4 hr (LDES)	0–10
Battery chemistry	Lower hazard technology (0)	Mixed (5)	Lithium-ion NMC/high energy density (10)	0–10
Number of battery containers	<20 (0)	20–80 (5)	>80 (10)	0–10
Energy density/site coverage	Low (0)	Moderate (5)	High (10)	0–10

Maximum Score Section A: 50

Section B – Sensitive Receptors

In this section greater weight is given to the people and sentient animals exposed, rather than simply the scale and nature of the battery. The key factor here is proximity, on the basis that the closer the receptor, by and large, the greater the risk.

Distance from Sensitive Receptor (metres)	Score
>500m	0
250-500m	3
100-250m	6
50-100m	9
<50m	12

Maximum Score Section B = 12 (but see additional potential weighting below)

Sensitive receptors;

These will include (but will not be limited to):

- homes
- educational establishments including nurseries, play groups, SEND provision and schools
- social care establishments including care homes, day centres and children's homes
- hospitals
- businesses occupied by staff
- equestrian facilities
- farms with livestock
- public rights of way
- campsites
- hotels

Possible additions to this element of the matrix

Multiple Sensitive Receptors: scores could be adjusted upwards where multiple receptors are involved: for instance a single receptor within 250 – 500m of the BESS could attract a score of 3, but this could be increased to 6 with two receptors, 9 with three receptors and so on.

Nature of sensitive receptor: this could be potentially weighted, if it is accepted that “not all receptors carry identical jeopardy”. One could easily envisage that a maternity wing of a hospital, a care home and a nursery facility would have a different risk profile than say a farm with livestock, a campsite, or offices where staff will have had fire safety training. I am reluctant however to suggest suitable weighting.

Section C – Emergency Response

This is the first of two sections that look at specific site characteristics from the viewpoint of responding to a fire event. Section looks at access arrangements in the round.

Local access arrangements

Factor	Score
Excellent two-way access (min 5.5m wide)	0
Minor restrictions	3
Single access road	6
Single-track road/poor turning	10

Distance from Major/Strategic Road Network

Distance	Score
<2 km	0
2–5 km	2
5–10 km	4
>10 km	6

Estimated appliance attendance time²²

Time	Score
<10 min	0
10–15	3
15–20	6
>20	10

First attendance - Who is likely to be there first?

Facility	Score
Whole-time station	0
Mixed station	3
On Call Station	6
Remote on-call coverage	10

Maximum Score Section C = 36**Section D – Site Characteristics**

There are a range of site specific characteristics which might influence risk. I have identified what appear to be the most significant.

Factor	Score Range
Flood risk	0-6
Water supply limitations	0-6
Topography restricting access	0-4
Confined site	0-6
Prevailing winds towards receptors	0-4
Potential smoke trapping valley	0-4

²² Assuming normal conditions

Maximum Score Section D = 30

Section E – Cumulative Infrastructure

This final section would involve an examination as to whether the BESS would sit in isolation or in tandem with associated renewable energy infrastructure.

Factor	Score Range
Single isolated BESS	0
Adjacent solar only	2
Adjacent grid substation	4
Adjacent additional BESS	6
Within an energy hub (or an emerging one)	0-4

Maximum Score Section E = 36

Additional factors (not included within this matrix, but potentially could be: quality of technical information submitted with application; exceptional circumstances (e.g. exceptional wildfire risk)

Overall Scoring

Total Score	Rating	Suggested FRS response
0–30	Low	No objection. Battery Safety Plan sufficient.
31–60	Moderate	Seek clarification and planning conditions.
61–90	High	Detailed technical review. Consider specialist fire engineering advice.
91–125	Very High	Formal concerns raised. Further evidence required before support.
>115	Exceptional	Consider recommending independent review, HSE engagement (where relevant), and formal objection if outstanding life-safety issues remain unresolved.

Suggested FRS Actions**Low Risk**

Routine consultation response

Battery Safety Plan acceptable

No further work

Moderate Risk

Request:

- improved Emergency Response Plan
- better access drawings
- water supply information
- confirmation of chemistry
- construction phasing

High Risk

Seek:

- independent fire engineering assessment
- thermal runaway modelling
- plume modelling
- emergency access review
- consultation with highways authority
- additional planning conditions

Exceptional Risk

Where significant unresolved uncertainties remain regarding life safety:

- recommend further independent assessment
- consider whether specialist regulators should be consulted where appropriate
- consider maintaining an objection until sufficient evidence is provided demonstrating risks have been reduced to an acceptable level.

Principles Behind the Matrix

The philosophy is essentially straightforward:

1. **Bigger systems generally present greater emergency management challenges.**

Although larger BESS installations are not necessarily more likely to catch fire, the potential consequences of a major incident may increase with scale, particularly where emergency response is prolonged.

2. **Long-duration storage deserves additional scrutiny.**

Longer-duration systems typically store substantially more energy than short-duration installations of the same power rating, potentially influencing incident duration, cooling requirements and emergency management.

3. **Location matters as much as technology.**

A well-designed BESS in an isolated industrial location may present less overall public risk than a smaller installation close to homes, schools or other sensitive receptors.

4. Emergency response capability is a key determinant of consequence.

Access constraints, travel times, water availability and road quality can all influence the practical management of an incident.

5. Uncertainty should influence scrutiny.

Where important technical information is missing or incomplete, a precautionary approach may justify requesting further evidence before concluding that risks are acceptable.

Potential refinements

If developed with input from Fire and Rescue Services, fire engineers and battery specialists, the matrix could be expanded.

With expert input, such a matrix could evolve into a consistent national screening methodology, helping Fire and Rescue Services prioritise resources toward developments where the combination of hazard, exposure and emergency response complexity is greatest, while ensuring lower-risk proposals receive proportionate attention.

