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Our ref: 525007
Your ref: EN0110023

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BY EMAIL ONLY

Dear Katherine King,

Environmental Impact Assessment Scoping Consultation under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulation 11

Proposal: Calderdale Energy Park

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in the consultation dated 01 September 2025, received on the same date.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

As mentioned in our submitted EIA scoping response (dated 29 September 2025), Natural England was unable to provide hydrological advice before the deadline. Please see below Annex C for the finalised advice on this topic. We apologise for the delay.

Please read the below advice alongside Natural England's submitted EIA scoping response (dated 29 September 2025).

For any further advice on this consultation please contact consultations@naturalengland.org.uk.

Yours sincerely

Yorkshire and Northern Lincolnshire Area Team
Natural England

Annex C – Natural England's Bespoke Advice on Hydrological Impacts for this Project

Table 1 – Comments on Hydrological Impacts to Internationally and Nationally Designated Sites		
Site name with link to conservation objectives	**Potential impact pathways where further information/assessment is required**	**Natural England comments on evidence requirements, approach to assessment and recommended guidance**
South Pennine Moors Special Area of Conservation (SAC) Conservation objectives: Designated Sites View Supplementary advice on conserving and restoring site features: UK0030280 South Pennine Moors SAC Published 10 Jul 2024	Hydrological impacts	Overall, the assessment of hydrological impacts needs to sufficiently account for the functional extent of the peatland system across the site. Natural England considers that the current scoping report does not demonstrate that a sufficient level of detail will be provided in the ES to ensure the ecohydrology of the wider ecosystem function will be assessed. Based on the information provided at this stage, the hydrological impacts are considered likely (in our view) to impact ecological structure and function in a wide area, potentially reducing future site resilience and limiting the ability of future restoration to improve site condition. We advise that an ecosystem function approach will help determine these impacts. Detailed assessment of the hydrological function of the site should be undertaken for the areas in scope for this project, in particular the turbine area and associated search areas (where associated with SAC/SSSI features), including water supply mechanisms (pluvial and groundwater inputs), transmissivity of water (levels, surface/subsurface movement and impedance/storage) and interactions with groundwaters/surface outflows. This should be undertaken using an integrated natural ecosystem function approach for understanding impacts of the proposal on the hydraulic function of the site, which underpins healthy blanket bog development and related processes, as per Natural England's Definition of Favourable Conservation Status for Blanket bog - RP2967[1]. As such, hydrological assessments also need to consider the intrinsic linkages with the expected natural overlying habitat in mind (see Natural England comments on SAC habitat impacts in our response dated 29 September 2025), with any alterations to hydrology likely to drive other changes to the site (e.g. habitat change, species assemblage changes, change in peat formation ability, and capacity to accumulate carbon).

[1] Definition of Favourable Conservation Status for Blanket bog - RP2967

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		A particular outcome of the assessments should be to sufficiently account for the functional ecohydrological extent of the peatland system across the whole site, rather than solely focusing on immediate and/or buffered areas that relate to the proposed development itself. Peatland habitat is highly sensitive to change, and some impacts may take time to propagate across the site, so the assessments will need to ensure any longer term effects are considered throughout the ecosystem. All hydrological assessments should be suitable in order to make this assessment appropriately.
		
		To support understanding of any hydrological impacts, the assessment should include the following (additional to or expanding on suggested assessments considered for the ES):
		
		• Consideration of any main site impacts (e.g. from all built and service infrastructure, as well as construction tracks and site access), including:
		  ○ Water level change
		  ○ Changes to surface and subsurface flows
		  ○ Changes to peak bulk density (e.g. via compression as an inhibitor to vertical and lateral movement of water within the peat)
		  ○ Damage or degradation to acrotelm and catotelm processes (as detailed in our response dated 29 September 2025)
		• Consider the complex functioning of interconnected hydrological units (e.g. mesotope/macrotope) across the site, in line with natural site topography, e.g.:
		  ○ Understand hydrological linkages across peatland system (active or potential where degraded function occurs)
		  ○ Look at potential interruptions to functional hydraulic pathways across the system, not just hydrology in proximity to proposed activities

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		○ Whole-site impacts from peat loss and process alteration due to peat compression and drainage changes, and respective impacts on surface and subsurface water transmissivity ○ Off-site hydrological linkages (either by water supply or outflow, ground or surface water regimes), including to any GWDTEs with hydrogeological connectivity • Consider the potential impact on locations of existing/planned restored peat, grips and gullies and any other catchment or restoration plans detailing work to improving the condition of the site • Propagation of hydrological impacts, and/or subsequent influence on potential water quality impacts, on the site or via any flush, fen or stream habitats draining site areas • Consider use of flood risk data in relation to natural peat function and site restoration potential for mitigating flood risk (e.g. as attenuation zones and/or regulation of downstream flow peaks) • Consideration of any future potential changes (e.g. further restoration, climate change impacts) relating to future stages (operation and decommissioning) • Additional effects of foundations, built and buried infrastructure (beyond habitat loss), as well as more temporary tracks, hardstandings and compound areas, should be considered due to edge effects, drying and drainage related impacts, as well as fragmentation of site hydrology • Micrositing activities should consider all of the functional elements of peat ecohydrology • Appropriateness and impacts of crossing infrastructure (e.g. culverts and bridges)

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		• Issues relating to overgrounding or undergrounding electricity cables, which may intersect site hydrology (and associated activities, such as horizontal directional drilling) • If possible, it would be valuable to include additional data, such as erosion risk zones, overland flow pathways, and ponding and attenuation data • Information that can feed into monitoring of the site and that appropriate standards and specifications are met relating to any monitoring approaches • Consider any additional datasets not listed that may be useful to carrying out the ecohydrological assessment in line with the advice provided. The assessment of impacts should therefore appropriately consider the area of impacted habitat based on functional impacts and the potential for future cumulative or progressive impacts. Loss of peatland function should be avoided where possible.
South Pennine Moors Site of Special Scientific Interest (SSSI) SSSI detail	Hydrological impacts	Our advice regarding the potential hydrological impact pathways to South Pennine Moors SSSI listed above broadly coincides with those set out above for their corresponding European sites. However, we highlight that the South Pennine Moors SSSI is designated for a number of additional features. Therefore, potential impacts on these features should also be considered in the relevant assessment.