



Transboundary screening undertaken by the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) for the purposes of regulation 32 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (The 2017 EIA Regulations)	
Project name:	Theddlethorpe Flexible Generation Project
Address/Location:	The proposed development comprises a flexible generation plant facility, two Battery Energy Storage System (BESS) facilities and a substation on land adjacent to the decommissioned Theddlethorpe Gas Terminal, and on land at Stain Lane and Strubby Airfield, in East Lindsey, Lincolnshire, England (National Grid Reference 548371, 387454).
Planning Inspectorate Ref:	EN0110008
Date screening undertaken:	First screening – 09 December 2025 following the applicant's request for a scoping opinion.

FIRST TRANSBOUNDARY SCREENING	
Document(s) used for transboundary Screening:	Theddlethorpe Flexible Generation Scoping Report ('the Scoping Report') dated September 2025.
Screening Criteria:	The Inspectorate's Comments:
Characteristics of the Development	<p>A description of the development is provided in section 5 of the Scoping Report and the scoping boundary is presented in appendices A and B.</p> <p>The scoping boundary for the proposed development covers an area of approximately 1,004 hectares (ha) and consists of a flexible thermal generation plant facility utilising natural gas or hydrogen, two BESS facilities and a substation. The proposed development would generate 1.5GW with a BESS of up to 1GW. There are three main sites for the proposed development, Theddlethorpe Thermal and Electrolysis Site (TES), Stain Lane BESS and Strubby Airfield BESS and substation, their key components are set out below.</p> <p>Theddlethorpe TES</p> <p>The Theddlethorpe TES site would comprise approximately 28 ha of fields adjacent to the former Theddlethorpe Gas Terminal located at Theddlethorpe in Lincolnshire. The Theddlethorpe TES site would comprise the thermal generation facility, a potential</p>

electrolysis facility and desalination plant, an overview of which is provided below:

Thermal generation facility

The proposed thermal generation facility would comprise either Combined Cycle Gas Turbines (CCGT) or reciprocating gas engines to generate electricity through the combustion of either natural gas or hydrogen.

The CCGT would be contained within a building and require a chimney stack with a maximum height of 110 m. Cooling water is required in order to operate the CCGT, which would be supplied via a pipeline from the North Sea with a desalination facility.

Reciprocating gas engines would be located within a container building and the required chimney stack would not exceed 110 m. The type of reciprocating gas engines has not yet been determined, however a maximum of 350 reciprocating gas engines has been proposed in the Scoping Report if the smallest type of engine is selected. The engines would be air cooled by radiators or fans.

If natural gas is used as the fuel source, CO₂ would be captured onsite and transferred into a CO₂ storage project outside of the proposed development. If required, a CO₂ pipeline link to a nearby carbon capture storage scheme or other transfer of CO₂ would be included within the proposed development. No CO₂ is proposed to be stored onsite.

Electrolysis facility

An electrolysis hydrogen production facility is proposed to be included on the TES site at Theddlethorpe. The electrolysis plant would produce hydrogen using water from the North Sea and electricity supplied by a connection into the Grimsby to Walpole National Grid connection project. The maximum volume of water required for electrolysis is up to 1,800 m³/hr. No hydrogen is proposed to be stored onsite, it would be combusted via the thermal facility onsite or transported directly into the National Gas network.

Desalination, water treatment and water pipeline

A desalination facility and water pipeline is proposed to source water necessary for cooling and the electrolysis facility. The water pipeline would be comprised of two pipes of 1220mm in diameter, one for water abstraction from the North Sea and the other for discharge of saltwater brine back to the North Sea following desalination and electrolysis processes. The water pipeline is proposed to be installed via trenchless techniques such as Horizontal Directional Drilling (HDD) until past the Mean High Water Spring.

BESS at Stain Lane site

The BESS at Stain Lane would be located on approximately 130 ha of land between the TES site and Strubby Airfield. The

dimensions of the BESS containers are an approximate 2.6m width, 9.2m length and 2.9m height. The dimensions of the inverter buildings are an approximate 9.5m width, 12m length and 4m height.

BESS and substation at Strubby Airfield site

A BESS facility would be located at the Strubby Airfield site which is approximately 45 ha. The required battery type and installation would be identical to the BESS proposed at Stain Lane. The project substation would either be located at the Strubby Airfield site or land to the southwest of Woodthorpe. The maximum parameters of the project substation are not set out in the Scoping Report.

Underground cable connection

The proposed underground cable connection would connect the three main sites of the proposed development to the project substation and National Grid's proposed Grimsby to Walpole project. The total distance for the cable route will be approximately 10 km.

Other works

Other works required for the proposed development, include:

- works to connect the proposed development to the grid at a new substation to be consented and delivered by the Grimsby to Walpole National Grid project.
- temporary and permanent access requirements to the site.
- areas for biodiversity and landscaping mitigation and enhancements.
- ancillary infrastructure works.
- potential utility diversions.
- other relevant highways works.

Construction

The Scoping Report notes that the details of the potential construction phasing and activities would be provided within the Preliminary Environmental Information Report (PEIR) and Environmental Statement (ES). The indicative location of construction compounds are illustrated in appendix B of the Scoping Report.

Trenchless techniques, such as HDD, are proposed for the installation of the water pipeline. Other crossing methods are not described in the Scoping Report.

Operation

No information regarding the estimated lifespan of the proposed development is set out in the Scoping Report. Operation is anticipated to require a maximum of 116 full time equivalent staff.

Decommissioning

	<p>The Scoping Report does not provide any details regarding the decommissioning activities of the proposed development.</p>
<p>Location of Development (including existing use) and Geographical area</p>	<p>The proposed development is located entirely within Lincolnshire and extends from Theddlethorpe in the east to Woodthorpe in the west. Underground cabling connects the Theddlethorpe TES to the two BESS facilities and to the project substation. Onward underground cables to the south of Woodthorpe would connect the proposed development to the proposed National Grid Grimsby to Walpole substation.</p> <p>The site is predominately comprised of agricultural fields and hedgerows. The site also contains the former airfield at Strubby and the former Theddlethorpe Gas Terminal site. An area of the site required for the proposed water pipeline extends out into the North Sea.</p> <p>The land which may be required for the proposed development is illustrated on the figure provided in appendix A of the Scoping Report. The location of the different elements of the proposed development within the order limits is illustrated on the figure in appendix B.</p> <p>No information is provided in the Scoping Report about any areas which could be affected which are under the jurisdiction of an EEA State.</p>
<p>Environmental Importance</p>	<p>Terrestrial and marine ecology</p> <p>The Scoping Report identifies five European sites designated for nature conservation within 10km of the proposed development. These include:</p> <ul style="list-style-type: none"> • Saltfleetby-Theddlethorpe Dune & Gibraltar Point Special Area of Conservation (SAC) • Humber Estuary Special Protection Area (SPA) • Humber Estuary Ramsar site • Humber Estuary SAC • Greater Wash SPA <p>The Scoping Report states that the Saltfleetby-Theddlethorpe Dune & Gibraltar Point SAC, and Humber Estuary SPA and Ramsar site are located directly adjacent to the proposed development boundary. However, the proposed water pipeline appears to cross through these designated sites.</p> <p><u>Saltfleetby-Theddlethorpe Dune & Gibraltar Point SAC</u></p> <p>Saltfleetby-Theddlethorpe Dune & Gibraltar Point SAC is located within scoping boundary and is designated for Annex I dune habitats.</p> <p>The Saltfleetby-Theddlethorpe Dunes Site of Special Scientific Interest (SSSI) is also located within the scoping boundary.</p> <p><u>Humber Estuary SPA</u></p>

Humber Estuary SPA is designated for Annex I bird species, migratory bird species, and an assemblage of waterbirds of international importance. The Scoping Report states that the Humber Estuary SPA is located directly adjacent to the proposed development; however, the proposed water pipeline appears to cross within the scoping boundary.

Humber Estuary Ramsar site

Humber Estuary Ramsar site also appears to be located within the scoping boundary and is designated for the following features:

- estuarine habitats, including dune systems, and humid dune slacks, intertidal mudflats and sandflats, salt marshes and coastal lagoons
- a breeding colony of grey seal
- a breeding population of natterjack toad
- population of non-breeding waterfowl
- populations of breeding shelduck and golden plover
- important migration route for river and sea lamprey

Humber Estuary SAC

Humber Estuary SAC is designated for Annex I estuarine habitats and Annex II species, including sea and river lamprey and grey seal. The proposed development is located 5km south of the Humber Estuary SAC.

Greater Wash SPA

Greater Wash SPA is located 0.5km east of the Theddlethorpe TES at its closest point to the proposed development. Greater Wash SPA is designated for non-breeding bird species, including red-throated diver, common scoter and little gull as well as breeding sandwich tern, common tern and little tern.

The Scoping Report states that The Wash and North Norfolk Coast SAC and Southern North Sea SAC are located within the marine ecology study area, which is defined as a 100km study area from the water pipeline intake and outfall to identify potential impacts on fish, shellfish and marine mammals.

The Wash and North Norfolk Coast SAC

The Wash and North Norfolk Coast is located 29km from the proposed development and is designated for harbour seal.

Southern North Sea SAC

Southern North Sea SAC is designated for harbour porpoise and is located 39km from the proposed development.

Ecological baseline

The ecological baseline conditions set out in the Scoping Report have been informed by a desk study. No ecological surveys have been undertaken at this stage. A list of proposed ecological surveys to be completed are set out in table 9.2 of the Scoping Report.

	<p>The Scoping Report in section 9.3 identifies records of species within the scoping boundary, including wintering and passage waterbird species associated with Humber Estuary SPA and Ramsar site.</p> <p>The Scoping Report also states that important species of fish, shellfish and marine mammals are present within the marine ecology study area (100km study area from the water pipeline intake and outfall). A number of the species present, such as grey seal, harbour seal and sea lamprey, are qualifying features of relevant European sites, including The Wash and North Norfolk Coast SAC, Southern North Sea SAC and Humber Estuary SAC and Ramsar site.</p> <p>Water environment</p> <p>A large proportion of the proposed development is located in flood zone 3. Figure 11-4 in the Scoping Report illustrates that the Theddlethorpe TES is located entirely flood zone 3.</p> <p>The Water Framework Directive (WFD) status of the water bodies in and around the application site has not been confirmed in the Scoping Report. A WFD screening and scoping assessment is proposed to be provided alongside the PEIR.</p>
Potential impacts and Carrier	<p>The Scoping Report does not identify any potential impacts that are likely to lead to significant effects on the environment in an EEA State.</p> <p>The Inspectorate notes that the pipeline into the North Sea for the abstraction of water and discharge of brine following the desalination and electrolysis processes has the potential to impact marine mammals and fish species associated with designated sites in the vicinity of the proposed development. However, there is no evidence at this time to suggest that should such effects occur, that populations associated with EEA states would be affected.</p>
Extent	<p>The Scoping Report has not identified any impacts which would be likely to significantly affect the environment in an EEA State.</p>
Magnitude	
Probability	
Duration	
Frequency	
Reversibility	
Cumulative impacts	<p>The applicant's approach to the assessment of cumulative effects is set out in section 7.16 of the Scoping Report. An initial list of developments to be included in the cumulative effects assessment is set out in table 7.4 of the Scoping Report. The applicant's full assessment of cumulative effects and short list of</p>

	developments has not yet been undertaken; the applicant has not identified any likely significant cumulative effects at this stage.
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Transboundary screening undertaken by the Inspectorate on behalf of the SoS

Under regulation 32 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (The 2017 EIA Regulations) and on the basis of the current information available from the applicant, the Inspectorate is of the view that the proposed development **is not likely** to have a significant effect on the environment in an EEA State.

In reaching this view the Inspectorate has applied the precautionary approach (as explained in its Advice Page Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process) and taken into account the information currently supplied by the applicant.

Action:

No further action required at this stage.

Date: 09 December 2025

Note: The SoS' duty under regulation 32 of the 2017 EIA Regulations continues throughout the application process.

Note:

The Inspectorate's screening of transboundary issues is based on the relevant considerations specified in the annex to its Advice Page, Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process, available at:

['Nationally Significant Infrastructure Projects: Advice on Transboundary Impacts and Process'](#).