From Cc: Subject: : "Have Your Say" Request Blocked error Date: 06 June 2025 13:52:01 Attacl Thankyou, please see below: Summary of Submission (IPR: 20054040) The submission raises significant concerns about the proposed energy infrastructure project, highlighting safety, environmental, and community impacts. Key points include: Liquid Ethylene Pipeline Risks: The Applicant has not addressed the safety hazards posed by a liquid ethylene pipeline crossing the A583 and A584 near farms and retail areas. Ethylene's explosive nature upon air contact poses severe risks if the pipeline is damaged. A safer route, such as the Hillhouse Technology Enterprise Zone, could have been considered with proper consultation. Ecology: The project threatens the Ribble Estuary and Lytham St. Anne's Dunes SSSIs, home to protected species like Sand Lizards. The Applicant fails to address impacts on biodiversity, including timing, access management, and infrastructure placement, violating EN-1 requirements (Section 5.4). No adequate information or mitigation is provided for impacts on migratory birds, breaching EN-1 Section 5.4.22. Transboundary Environmental Concerns: A UK EIA screening identified potential impacts on Ireland, including commercial fishing, marine life, and navigation, which the Applicant has not adequately addressed. Cumulative Infrastructure Impact: The project, alongside Clifton Marsh and Grange Farm Solar Farms (covering ~259 acres) and

Community and Traffic Concerns: The proposed cable route along Parrox Lane conflicts with the Clifton Farms solar project, causing heavy traffic, noise, dust, and pollution on a single-track road near Newton Marsh SSSI. Alternative access via Lower Lane, a busy route, will increase construction traffic, raising risks of accidents and disruption.

Springfields Nuclear Facility (~205 acres), creates a significant footprint in small rural villages, exacerbating environmental and

community strain.

Fracking Legacy and Seismic Risks: The Fylde's history of fracking-induced seismic activity (e.g., 2019 2.9-magnitude earthquake) and complex geology with stressed faults heighten risks. Excavation near abandoned wells could trigger further tremors, methane leaks, or contamination, further compromising well integrity and groundwater safety.

Groundwater and Air Pollution: Excavation risks releasing fracking fluids, radioactive materials (e.g., Thorium-232, radon), and volatile organic compounds (VOCs), posing health risks like cancer and respiratory issues. Elevated Thorium-232 readings near Preston New Road (May 2025) indicate potential radon issues, requiring independent investigation.

Community Distrust and Mental Health: The Applicant's lack of transparency, inadequate mitigation, and poor consultation mirror past issues with Cuadrilla's fracking operations, which violated regulations and caused community distress. Residents fear renewed environmental damage, health risks, and seismic activity, reviving trauma from past infrastructure projects.

#### WRITTEN SUBMISSION RE MORGAN AND MORECAMBE OWFTA- Deadline 2

# IPR: 20054040

Further to my submission via interested party number 35794 in January, and my verbal submissions in April 2025 plus a further written submission in May, I would like the Ex A to consider the following points:

## Liquid Ethylene pipeline.

The Applicant has failed to consider or address the liquid ethylene pipeline which runs across the A583 and A584 close to farms and retail outlets. Liquid ethylene explodes spontaneously on contact with air and any damage to the pipeline poses an acute safety risk. If the pipeline is compromised, e.g through vibrations from drilling, the ethylene will escape through cracks causing immense danger to public safety, residential buildings, and businesses. If the Applicant had conducted robust preliminary investigations and a thorough Consultation, the LE pipeline would have been evident and a more suitable, less hazardous route identified, e.g. the Hill house Technology Enterprise Zone.

Section 5.4 of EN-1 sets out requirements relating to biodiversity and geological conservation. The Ribble Estuary SSSI and adjoining Lytham St. Anne's Dunes SSSI

support Sand Lizards which are a priority species, protected under the Wildlife

Countryside Act, 1981. The proposed development will significantly negatively impact these areas. No consideration is given to the timing, duration and frequency of works, the access management, the size, number and location of build infrastructure within these sensitive areas

7.5 Section 5.4.22 of EN-1 specifically requires that NSIP proposals consider

of mobile and migratory species. The Applicant has not provided proper information relating to impacts on birds and proposed mitigation and therefore, the ES and it's proposals do not meet the requirements of EN-1. Any attempt to balance the adverse impacts against the benefits of the scheme must be supported by the required information which the Applicant fails to

National Policy Statements EN-1, EN-3 and EN5 are predicated on balance and provisions for appropriate mitigation. Section 2.6.2 of EN-1 explains that sustainable development is relevant not just in terms of addressing climate change but also because the way energy infrastructure is deployed affects the wellbeing of the environment, society and the economy. The applicant is

unable to explain how the infrastructure will be deployed and therefore information supplied in inadequate and lacking crucial detail.

#### Transboundary Environmental Concerns

A transboundary Environmental Impact Assessment (EIA) screening conducted by the UK identified potential impacts on Ireland, including effects on commercial fishing, fish and shellfish, marine mammals, and shipping and navigation.

### Cumulative impact of energy infrastructure

Clifton Marsh Solar Development and Grange Farm Solar Farm propose to cover c259 acres. This is a very significant footprint for such small villages. The Springfields Nuclear Fuel Facility just outside of Clifton covers a further c205 acres.

Community impacts in conjunction with other energy infrastructure works Clifton Farms solar project is proposed on agricultural land off Parrox Lane via A854. This is in direct conflict with The Applicants proposed cable route. Parrox Lane is a single track road used regularly by villagers for recreation and close to Newton Marsh SSSI. It is disturbing and upsetting for residents to suffer heavy traffic with land-take involving dust, noise and pollution within a rural village from two projects undertaken in such close proximity within a short space of time.

The displacement of local wildlife and habitats on caused by the proposed works on high value agricultural land and close to an SSSI is likely be particularly concerning. It would require further consideration by the Applicant based on the cumulative effect of previous recent infrastructure works in close proximity.

Grange Farms application was resubmitted due to objections by the LCC and County Council Highways Teams re access. Alternative access for the works is now proposed via Lower Lane, Freckleton village. This access route would cross the cabling route causing a huge increase in construction traffic for two energy projects down a small country road within a short space of time. Lower Lane runs off the A584. This is a busy, main route for BAE commuters and traffic to/from Preston city. Heavy traffic combined with HGV's/tankers will cause stress and chaos on the roads just outside Freckleton village and will increase the risk of traffic accidents.

### Fylde's hydraulic fracturing (fracking) legacy

Over 50 seismic events and a 2.9-magnitude earthquake in 2019 and was linked to fracking at Preston New Road and led to a moratorium due to unpredictable seismic risks and community outcry.

Between 2011 and 2019 fracking operations appear to have affected the land characteristics, particularly south of the Preston New Road drill pad and have continued to worsen.

## Land changes around local faultlines

The Fylde has a complex geological structure with pre-existing faults. Research, such as a 2022 study in Petroleum Geoscience, noted that faults here were critically stressed and prone to slipping when subject to pressures. Further studies (e.g., Heriot-Watt, 2020) highlight complex faulting in the Fylde.

Land sinking and becoming waterlogged, new areas of standing water, and areas of discolouration of soil, potentially from contaminants are visible along the fault trace south of Preston New Road, in close proximity to the proposed works

Sediment staining can be seen in these areas also, which could be an indicator of water from the aquifer reaching the surface.

LiDAR comparisons reveal a -12 cm of land depression (between 2018 and 2022) from Anna's road north to Preston New Road, following what is named the 'Wakenark' fault.

Farmers have been observed installing new drainage in these areas in an attempt to alleviate the water and reclaim their fields.

# Groundwater and Surface Water Contamination

Excavation near abandoned wells can compromise well integrity, leading to leaks of fracking fluids, flowback water, or naturally occurring substances like arsenic, barium, and radioactive materials into aquifers or surface water. Studies in Pennsylvania have linked shale gas development to groundwater contamination, with detectable levels of fracking-related chemicals in public water supplies.

If formation fluid migrates along the fault this could become a serious health hazard for human health and the food chain should toxins reach the surface. Very little is known about the behaviour of fracking fluids once in the ground. (The industry admits in official documents that they cannot account for up to 40% of the fluid.)

#### Air Pollution:

It is well documented that fracking can cause Naturally Occurring Radioactive Materials (NORM) to reach above the ground.

An abandoned well exists on Anna's road and disturbing it through excavation, as in the proposed works, may release VOCs, hazardous air pollutants and radioactive particles into the air.

Thorium-232 and its decay products, including radon, pose serious health risks due to their radioactivity. Exposure, particularly through inhalation of dust, can increase the risk of developing lung or bone cancer and other severe health

problems (National Research Council)

A Radiacode 103 gamma spectrometer at Prest revealed readings for Thorium 232 element that is mobilised by fracking operations and usually not found at the surface.

Readings from publicly accessible locations in May 2025 close to the Preston New Road site revealed elevated doses of Thorium 232 up to 4 times the background levels. This may indicate that radon has become an issue in the vicinity. The proposed works require very careful consideration in light of these findings. It would necessitate further investigations by an independent competent professional. Please see Radiacode screen image below.



A Harvard study found increased downwind radioactivity up to 12 miles from fracking wells, potentially linked to disturbed shale bedrock.

Seismic Activity and Structural Risks: Excavation near abandoned wells could trigger further seismic activity particularly in the Fylde area which has a history of fracking-induced tremors.

Within this area of complex geology, even shallow drilling can intersect minor faults, potentially causing localized seismic activity.

A 2020 study in the Seismological Research Letters journal confirmed seismic events caused deformations in the Preston New Road well casing, raising concerns about potential leaks or structural failures. The Oil and Gas Authority (OGA) reported that such damage could increase risks of groundwater contamination or methane heightens health risks through water or air pollution.

Excavation near the abandoned shale gas fracking wells could release methane, VOCs, and other toxic substances, leading to risks of cancer, respiratory issues, reproductive harm, and explosions. Groundwater and air contamination are primary concerns, with vulnerable populations like children, the elderly, and low-income communities at higher risk.

Given the complexity and potential severity of these risks, any excavation in such areas should involve thorough environmental assessments and community engagement to protect public health and safety. The Applicant fails to address these concerns.

The above information is important to consider in relation to the current proposal. While both very different energy production methods they share a fundamental commonality. A shared, deep concern about impacts on public health, environment and quality of life.

#### Current sentiment

Generally speaking, Fylde residents are understandably distrustful of companies who execute NSIP's and regulators, e.g. Cuadrilla violated regulations by breaching multiple planning conditions and failing to report well damage. This non-compliance and deviation from approved plans also raised concerns about regulatory oversight.

The Applicants lack of transparency, insufficient detail, inadequate mitigation measures and failure to consult with residents adequately and address concerns raised, mirrors Cuadrilla's Application and approach and reinstates fear in Fylde residents of large scale energy infrastructure projects. The proposed plan sends warning signs to Fylde residents and has resurfaced a collective uncertainty, fear and anxiety with an anger that the Fylde, yet again, appear to be losers in the energy infrastructure field and that, yet again, the proposed works threaten residents health, environment and quality of life.

The project's risks to public safety, the environment, and community wellbeing outweigh its benefits due to insufficient planning, consultation, mitigation methods and consideration of cumulative impacts.