

From: [REDACTED]
To: [Hornsea Project Three](#)
Subject: Planning Application - Further information to comment Ref: EN010080
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Good afternoon.

Further to my initial comments I would like to add some additional information that I feel may be relevant in terms of the criticality of the need to design in sufficient resilience to protect this important energy infrastructure project.

Solar and Space weather resilience.

The UK National Risk Register issued in 2017 clearly states that there are significant risks to the national infrastructure that need to be considered.

Space weather, in particular, Coronal Mass Ejections in particular are a significant risk to the national energy infrastructure.

UK Space Weather Preparedness Strategy Department for Business, Innovation and Skills, Space Weather Preparedness Strategy, version 2.1 2015, section 5.4

“Some UK systems are more resilient and robust to space weather than counterparts abroad: the GB power grid network is highly meshed and has a great deal of built in redundancy. This potentially makes it less susceptible to space weather effects than power grids in some other countries. Over recent years a more resilient design for new transformers has been used to provide further mitigation.

The UK’s mobile communication stations rely on power. However, they will continue to supply services to customers if timing synchronisation through Global Navigation Satellite Systems link is lost. In North America, an in-built parallel system that needs both power and GPS to function has been introduced, increasing vulnerabilities.

Some of this resilience is not the result of planning for this risk but good fortune. A priority for the future is to ensure we design in resilience to space weather into technology in line with our understanding of the risk.”

Cyber Attacks

National Cyber Security Centre coordinates the nation’s infrastructure cyber defences. It would be useful to know:

1. Has the Operator consulted with the NCSC, or participated in any industry-wide vulnerability reviews?
2. If so, has it taken any recommended action?

Thank you for considering my comments.

Regards
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Sent from [Mail](#) for Windows 10

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