Space Weather Risks for the Energy Sector

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Résumé

Extreme space weather events such as major geomagnetic storms could have a serious impact on ground level infrastructure. In the UK, since 2011, this hazard has been included inside the National Risk Register (a governmental document listing the significant potential risks to the UK).

The aim of the Natural Hazard and Environmental (NH-Env) Group at EDF Energy R&D UK Centre is to investigate and characterize all type of potential natural hazards that may impact current EDF's power stations and future projects. Hence, space weather risks due to geomagnetic storms (and geomagnetically induced current) and neutron irradiation at ground level from GLE are analyzed.

After a brief introduction of the company and the (NH-Env) group, the different risks from space weather for the energy sector will be described and finally we shall give an overview of our associated R&D works.

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