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Network Innovation Competition 2020 Supplementary Answer form

Project Name	**Retrofit Insulated Cross Arms (RICA)**		
Question number	**#9**	**Pro forma section**	**6.1.3**
Question date	**08/09/2020**	**Answer date**	**10/09/2020**
Question summary	**Please describe the scope of the work that will be done as part of the project to assess the impact of design choices on e-field factors (page 36)**		

Answer (please retain document formatting and do not exceed 2 pages unless otherwise agreed with Ofgem)

In order for RICAs to be an acceptable investment, their installation must still ensure our assets continue to comply with both public and occupational electric and magnetic field (EMF) exposure guidelines. NGET has a policy of ensuring compliance with Government EMF safety limits, supporting research, working with stakeholders and providing public literature (http://www.emfs.info/); Helping to deliver a safe and reliable electricity system.

During the design process for RICAs, one of the limitations that needs to be considered will be the electric and magnetic fields that present around the assets. Prior to investing in the manufacturing of RICAs for testing, desk-based assessments will need to be performed on the fields that would result from their application on routes which could technically take RICAs. These checks will de-risk future adoption, ensure the technology can be deployed as widely

across the UK as possible, and mean that we can mitigate any issues which arise at an early stage. The information produced will also support stakeholder engagement throughout the project; as this question is likely to be raised.

In addition to the assessments of EMF exposures to employees and members of the public, conductor surface electrical gradient studies will need to be considered. These asset electrical gradient assessments are essential to ensure a long-life asset, produce an optimal design, and to ensure that the RICAs do not generate audible noise; preventing disruption to local stakeholders.