

Network Innovation Competition 2020 Supplementary Answer form

Project Name	Retrofit Insulated Cross Arms (RICA)		
Question number	5	Pro forma section	Section 2
Question date	18/08/2020	Answer date	20/08/2020
Question summary	Please explain the reasons for which the development of the commercial business case has been included as part of this demonstration project. We note that there is a clear cut off for funded NIC innovation activity at Technology Readiness Level 8.		

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

We are assuming here that Ofgem are referring to the inclusion of developing an "Investment Case" as part of the project, rather than the commercial case outlined in Section 3.3.1.

The aim of the RICA project, is to bring a new technology to the point where it can be used within the network, be deployed with an acceptable amount of risk, and enable all UK utilities to adopt the technology and learnings. Deploying this technology on the network is the clear marker that shows the transition from TRL 8 to TRL 9; which is not funded by the project. We recognise that as per section 1.18 of the NIC governance document, that projects with a TRL of 9 are not eligible for NIC funding.

When any investment is made in the network, options for delivering network capability are assessed for their ability to deliver this capability (e.g. MW), cost, and the prominent risks in delivery. For innovative technologies, such as RICA, there are often gaps in the existing knowledge which manifest themselves during this assessment as large financial, time, or technology risks. These are ultimately translated into financial terms, and mean that risky innovations are appropriately excluded during the options assessment.

Because Innovations like RICA, are excluded early in the process due to the large number of risks involved in its development, developing a more detailed investment case is above what would normally be done through business as usual; even if these risks were outlined in greater detail, this would not solve them, nor would there be any guarantee that further risks would not manifest during the technology's development. We believe the bid documentation developed has provided that first review of these risks, and clearly outlined the benefits for consumers from investment in RICA.

The inclusion of an investment case in the NIC project is a useful mechanism to support the project in several ways. First, the continual reviewing of the Investment case will highlight progress from the innovations and help to guide design and specification choices throughout the project. For example, as the specific design choices become clearer their impact on the overall investment case also can be quantified with greater confidence (such as installation time, outage requirements, and upfront costs), technology decisions can then be made in the context of the whole investment case, rather than a single element, leading to an overall better investment. Having clear line-of-sight to this investment case will help to keep the innovation's focused on delivering value and mean we can target areas of uncertainty in the investment as its develops.

Furthermore, this continual review of this document over the project will serve a risk mitigation method, as the investment is reviewed as innovations are delivered. This method helps to de-risk and address the unknown-unknowns early in the development phase, rather than during the attempts to develop the technology which can delay or prevent adoption.

This document will also serve to support other utilities in adopting the outcomes of this NIC project. Including this within the project's scope will mean that NGET can easily share this information, and help others adopt the same technology sooner; accelerating the UK's low carbon economic ambitions and delivering more value to consumers.