

Electricity Network Innovation Competition Full Submission
Supplementary Answer Form

Project: REVISE

Tick if this answer has been provided verbally: ☐

Project code	WPD/EN/NIC/05	Question Number	18
Question date	21 August 2018	Answer date	23 August 2018
Submission section question relates to	Section 2		
Topic	d) Is innovative		
Question	For Method 1, it appears that conventional equipment will be repackaged for the ACS application. Is that correct or is it also the intention to trial innovative components in the ACS?		
Notes on question	None		
Answer	<p>The ACS will incorporate the latest advances in substation technology to provide an industry first, ultra-compact, standardised, pre-commissioned connection solution for DG on the 33kV network. The innovative aspects of the ACS are detailed in the FSP in Sections 2.1.2, 2.2, 4.3 & L.2.3. This response builds upon the detail in our FSP and the answers to Questions 2 and 6 that we have submitted previously.</p> <p>Within the ACS, the only conventional equipment will be the EHV switchgear, in particular the circuit breaker and isolator components. There is no need to develop this equipment further as it is fully standardised and has a mature TRL. However, we will explore innovative switchgear layouts and switchgear control interfaces to maximise space saving within the ACS.</p> <p>The remaining equipment in the ACS incorporates significant innovative components and systems as detailed below:</p> <ol style="list-style-type: none">1. State-of-the-art digital protection relays which will combine multiple protection functions into a single unit rather than the traditional practice of having a relay per function;2. Next generation transducers for control and measurement which will promote space saving and design rationalisation i.e. one transducer driving multiple devices. In addition they will improve the accuracy and speed of data management and processing;		

	<ol style="list-style-type: none">3. Advanced communications technology that cater for all relevant telecommunications standards, thus allowing an interoperable, future-proof telecoms solution; and4. Novel approaches to the design of auxiliary systems so that they are specified for the application and promote a reduced form factor.
Attachments	None