Electricity Network Innovation Competition Full Submission

Supplementary Answer Form

Project: Black Start from Distributed Energy Resources

Tick if this answer has been provided verbally: ☐

Project code	ESOEN01	Question Number	62
Question date	18 Sep 2018	Answer date	20 Sep 2018
Submission section question relates to	Appendix G Workstream 3		
Topic	(g) Robust methodology and ready to implement		
Question	In addition to the response in Q9 and the details provided in the Case Studies, can you please confirm that you aim to establish pilot islands that are able to maintain internal stability for each of the Case Study areas and can you provide a map or list of potential DER driven power islands across the country		
Notes on question			
Answer	The case studies proposed in Appendix G have been selected based on their potential to provide a distributed restart service and operate as DER-based power islands. Whether this is truly feasible, however, from technical, organisational and commercial perspectives, remains to be discovered within the project. There are significant barriers to be overcome and innovative approaches must be developed and tested within the project. We aim to determine the requirements for distributed restart, demonstrate what is needed to deliver successful operation, and thereby provide the industry with the learning essential for the method to be adopted widely in BAU. We expect to find that establishing and maintaining a stable power island will not be practical in some of our case studies, due to limitations of the DER, the network, or other factors. Given the cost of live trials and the wide range of issues still to be examined within the project, it is our aspiration that we take two case studies to the full demonstration stage. We will take a prudent approach and it is likely that we will test individual components before demonstrating full power island operation. Other case studies will be examined in simulation and the organisational and communications aspects will be tested in the proposed desktop exercises. We have not, at bid stage, reviewed all potential opportunities across the		

	country although all DNOs have expressed a strong interest in being involved in the project as it develops. Input from the Stakeholder Advisory Group will support assessment of the potential for DER-driven power islands across GB. Ultimately, the potential for roll-out will depend on what the project learns about the requirements for successful delivery of Black Start, in DER and in the DSO and ESO. This is not known at this time, which is why we believe this project is necessary to provide the industry with a firm basis for progress in this area. Based on what the project determines as the key criteria, workstream 3 includes a task that will "Assess potential for Black Start from DER across GB", which will be used to inform the revised CBA. There is little doubt, however, that the volume of DER will continue to grow and so the relevance and importance of this work will also grow over the coming years.
Attachments	