

LCN Fund Full Submission

Supplementary Answer Form

Tick if this answer is Confidential: ☐

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Project code:	SPD2004	Question Number	SPD003
Question date	23/08/2012	Answer date	30/08/2012
Submission section question relates to	2		
Topic	Project Description		
Question	On page 3 of the Full Submission Pro-forma under the sub heading "The Project Methods" eight methods to be trialled within the project are listed and described. For each one separately please explain why these need LCNF funding and cannot be undertaken as normal "business as usual" activities of the DNO		
Notes on question			
Answer	<p>Method 1 (Additional and more frequently updated network information to customers). The information that will be provided and the processes which will need to be developed to create this information will be a step change in the DNOs approach. At present a DNOs funding is sufficient to fulfil our obligations therefore any additional costs that would need to be borne for this development would need to be passed through the charges for new connections, thus increasing the costs of connections in the short term. The provision of such information would be of primary interest to benefiting customers opposed to the DNO who would be required to fund the change. A more detailed breakdown of the additional information and justification will be provided at the second bilateral with the Expert panel as requested at the initial meeting.</p> <p>Method 2 (Introduction of an enhanced connections process). As per method 1, this change would involve the significant development of new systems which will improve the design of connections with the aim of reducing the time and effort in developing connection quotes. These new systems will also involve factoring in new approaches to providing connections such as active network management and facilitating</p>		

communities which are netting off generation with local demand, the tools for which are not currently available and will require to be developed as part of the project.

Method 3 (Investigate and demonstrate the role communities can play in accelerating renewable connection). This method will also involve a review and identification of options for community scale active energy management (generation, storage and demand) within network ANM scheme through joint working with Community Energy Scotland, different types of community scale energy developers and SP. Given feedback from project stakeholders, it is not deemed to be realistic to expect a community group to fund the development of such a demonstration which involves a variety of other technology such as energy storage.

Method 4 (Demonstrate commercial and technical solutions which accelerate connections at exporting GSPs). The impact of connecting a generator to the distribution side of a GSP has consequences on the Transmission Owner and System Operator as well as the Distribution company in this example. This method will demonstrate an alternative to the traditional reinforcement that would be required and the long lead time that would result as transmission upgrades take place. As separate entities, the distribution business has normally very little control in influencing the activity of the transmission company to facilitate generation such as this.

Method 5 (Investigate and trial new technical and commercial solutions for constrained connections). The management of constrained connections has been examined in a smaller scale in other projects, this method will demonstrate more complex scenarios where multiple generators are likely to be interacting with each other depending upon the configuration of the network and the commercial and technical issues will require extensive work to resolve how these will be treated. In business as usual these benefits will generally accrue to the developer however in a number of circumstances, the constraint may impact multiple generators which makes resolving these issues more difficult to resolve and without LCN funding it is likely that each developer would pursue their own agenda which may not be the most holistic solution which optimises all of the generators.

Method 6 (Identify the process and inform the business case for 'smart enabling' of generation dominated areas). The Smart Grid Forum Work Stream 2 and 3 identified the evaluation of top down compared to incremental investment strategy in smart technology as a key area where further work was required to be undertaken. Incremental investment is already undertaken in business as usual for active network management in a small number of cases. Through this project we will be demonstrating a top down investment approach to enable the trial area with the foundations of an active network management platform which generators can then connect into. This method will examine the business case for such an approach compared to the incremental approach which is normally used. At present DNOs do not have the funding to undertake this as this may be regarded as speculative investment as it is challenging to justify without prior experience.

Method 7 (Define the process for identifying and implementing a 'smart enabled' area). This method will build on method 6 and will

	<p>involve defining the process for how top down investment strategies can be justified and the benefits they will create. This activity involves University of Strathclyde and will provide analysis and evidence of future investment strategies which is of benefit to all DNOs and customers. This is not an activity a DNO would normally undertake as part of business as usual as it is developing evidence and learning for the future.</p> <p>Method 8 (Avoid unnecessary duplication of other projects but build on previous learning where possible). The business as usual approach for adopting learning from other LCNF projects would be to replicate what has been done elsewhere, this method is specifically to identify how the activity of other projects can be developed to a next stage based on the ARC project to ensure that it is not a duplication of effort and that learning is increasing.</p>
Attachments	
Verbal Clarifications (Consultants)	