

LCN Fund Full Submission

Supplementary Answer Form

Tick if this answer is Confidential: ☐

Tick if this answer has been provided verbally: ☐

Project code:	SPT 2003	Question Number	12
Question date	06/09/2011	Answer date	13/09/2011
Submission section question relates to			
Topic	Carbon		
Question	How complementary is the project to other Tier 2, Tier 1 and IFI projects in a way that enables carbon reductions to be delivered.		
Notes on question			
Answer	<p>Within Scottish Power we already have a number of Tier 1 projects which we believe complement this project, both for achieving carbon savings and assisting with the technology development.</p> <p>A Tier 1 project is already under way to trial the use of dynamic thermal rating on 132kV overhead lines in North Wales. The objective is to allow greater volume of wind generation to be connected to the network without the requirement of building additional circuits. This will allow wind generation to be connected in a shorter time frame and for significantly lower cost albeit, short constraints may be required if the thermal rating is exceeded under certain circumstances.</p> <p>This project will assist the Tier 2 project as a knowledge base has been developed for the application of dynamic thermal rating, and the Tier 2 project will allow this to be applied to a different voltage range (33kV) and alternative assets (transformers as well as overhead lines).</p> <p>A number of other Tier 1 projects are also underway by other DNOs</p>		

	<p>which will complement the learning from this project, particularly the Central Networks (now WPD) project examining the PV impact on suburban networks which is focussed on the loading on LV cables. The outcome of this project is likely to complement our project by enabling a greater volume of PV to be connected to the LV network.</p> <p>We also recognise the learning that is being developed by WPD in the Tier 2 project 'LV Templates for a Low Carbon Future'. Consequently, we will be looking to incorporate the learning from this project into the monitoring work that we will be undertaking, such that it can facilitate greater uptake of Low Carbon technology, and avoid duplicating work.</p> <p>From our understanding of other Tier 2 projects that have been submitted this year, the range of technologies we are trialling looks to complement a number of the other projects.</p> <p>It is recognised that the FALCON project will also be trialling dynamic thermal rating on the 11kV network however Scottish Power's focus will be on the benefits it can create on the 33kV network and primary transformers, and specifically, the integration of thermal rating across the multiple assets that create a circuit.</p> <p>Between these two projects this will create extensive learning on the application of dynamic rating to a wide range of assets and a number of different environments. This knowledge will help with the facilitation of more generation and load onto the network as may be expected in the future as a result of the uptake of low carbon technology.</p> <p>IFI projects are not specifically focussed at enabling carbon reductions as they look at Innovation in a more general sense. This project will however be utilising the development of the Power Network Demonstration Centre to trial the technology before it is deployed on the network which was funded through IFI.</p>
Attachments	
Verbal Clarifications (Consultants)	