


LCN Fund Full Submission

Supplementary Answer Form

Tick if this answer is Confidential: ☐

Tick if this answer has been provided verbally: ☐

Project code:	WPD-T2-04	Question Number	WPD017
Question date	04.09.2012	Answer date	07.09.2012
Submission section question relates to	3		
Topic	Project Business Case		
Question	Please describe the IFI and Tier 1 projects that this project is building on. Why can you not undertake stages Alpha and Beta as a Tier 1 project?		
Notes on question			
Answer	<p>The following IFI and Tier-1 projects have provided learning feeding in to this project:</p> <p>IFI Superconducting Fault Current Limiter – Three SFCLs were trialled on three separate and distinct 11kV distribution networks, in three DNO areas (ENW, NPG and SPEN).</p> <p>IFI Resistive Superconducting Fault Current Limiter – Design and development of a RSFCL utilising MgB₂ on WPD's 11kV network.</p> <p>LCNF 33kV Superconducting Fault Current Limiter – Development of a 33kV SFCL by NPG to understand how it can be used to mitigate DG connection issues.</p> <p>IFI Collaborative EATL Fault Level Monitor – Project to develop and test a FLM, which utilises natural network disturbances to derive the Fault Level.</p> <p>IFI to support PNRA student– Thesis to propose an electrical instrument (a Fault Level Monitor) that is capable of calculating the network source impedance, the X/R ratio of this impedance and the fault contribution of connected rotating plant.</p>		

	<p>IFI Outram Fault Level Monitor (SPEN) - The aim of this project is the development of a portable instrument that can successfully measure Fault Level on a distribution network with repeatability and reliability.</p> <p>LCNF Active Fault Level Management Scheme – Project to develop a device that can use natural network disturbances and safe, non-customer effecting, artificial disturbances to monitor Fault Level in real-time.</p> <p>Further detail of these projects can be found in Appendix K and N of the FSP submission.</p> <p>Due to the integrated nature of the project, stages Alpha and Beta inform Gamma. The installation of Method Gamma will provide significant learning that will inform Methods Alpha and Beta, particularly Alpha in tuning the advanced network model. This means that the greatest benefit is gained through the implementation of all three Methods. This concept is expanded on in the attached diagram.</p>
Attachments	 <p>Integrated Methods V002 - 07.09.2012.pr</p>
Verbal Clarifications (Consultants)	