

LCN Fund Full Submission

Supplementary Answer Form

Tick if this answer is Confidential: ☐

Tick if this answer has been provided verbally: ☐

Project code:	ENWLT2003	Question Number	35
Question date	13 October 2011	Answer date	20 October 2011
Submission section question relates to	Section 4		
Topic	Losses		
Question	<p>P22 of your report states that £20.6m of the method costs comprised of increased losses from closing the rings and also the increased loading of the network. This is a significant proportion of your total method costs of £38.4m and yet we note that you are not seeking protection under the losses incentive scheme for any increased losses. Can you please explain why this appears to be such a large proportion of your method cost and yet does not feature in your project costs.</p>		
Notes on question	n/a		
Answer	<p>Section 4 details the C₂C Method costs which include a value of £20.6m of costs borne by customers from the increased losses from the C₂C Trial circuits up to 2035.</p> <p>There are four key facts inherent within this statement:</p> <ol style="list-style-type: none"> 1. the estimate is based upon scaling up the losses calculated in the analysis of the ten case studies, undertaken by PB Power, to the size of the C₂C Trial (section 2.5 of Appendix 11 explains the steps taken); 2. the losses are a substantial part of the method costs due to the relationship between current and power losses, explained by Ohm's law ie the lost power equals the square of the current multiplied by the resistance. Therefore for a given circuit resistance, the lost power increases with the square of the current and the lost energy is the power multiplied by time; 		

	<p>3. the increased losses are calculated as the value over and above the losses associated with traditional reinforcement ie the baseline losses (figure 6 on page 28 illustrates the value of increased losses); and</p> <p>4. the timeline is up to 2035, whereas the C₂C Project will run for three years, starting in January 2012 and finishing in December 2014.</p> <p>We have not sought protection against the impact of losses during the C₂C Project for the following two reasons:</p> <p>1. we estimate that the formation of the HV rings will initially reduce network losses, but overtime the losses will increase as the inherent network capacity is utilised but at the end of the three-year C₂C Project we expect to be neutral in terms of outturn losses (figure 13A.2 of Appendix 11 shows the change in losses over time); and</p> <p>2. the losses incentive mechanism has a two-year time lag for the calculation of the penalties / rewards to allow the settlement process to be finalised. The formation of the HV rings occurs in April 2013, immediately after the technology development phase, meaning that the C₂C Project will have been completed and closed before the calculation of the losses penalties / rewards (section 7 on page 42 explains this time lag).</p>
Attachments	None.
Verbal Clarifications (Consultants)	None.