

LCNF Full Submission

Supplementary Answer Form

DNO Name:	Electricity North West Limited	Question Number:	ENWL024
Question Date:	17 Sept 2010	Answer Date:	21 Sept 2010
Question Topic:	Box 7 – Superconducting Fault Current Limiter		

Original Question No:		Original Answer Date:	
Original Question:			
Original Answer:			

Question:	Will £2M be the roll out cost for super conducting fault limiters and if so can you confirm there use is cost effective. If not is this research and development?
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Answer:	<p>The £2m cost for the Superconducting Fault Current limiter (SFCL) is not considered to be the optimum roll out cost for this equipment. The costs in this Project for this device are higher than would be expected in the longer term because it is effectively being ordered as a one-off item. The costs for SFCLs are expected to reduce as orders increase and the equipment becomes more commonplace across the distribution networks. Electricity North West has already gained considerable experience with SFCLs having been the only DNO to have previously installed one on our network as part of a R&D project (as reported in our annual IFI submissions). Therefore the installation of a second device is not considered to be R&D but deployment, as we already understand the requirements for the installation, operation and control of the SFCL on our network.</p> <p>It should also be borne in mind that unlike capacity issues, a raised fault level is seen throughout the network. The application of SFCL technology controls the fault level across the network therefore removing</p>
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	<p>the need to replace overstressed assets at many network locations. This is particularly important for HV networks operating at 6.6kV where the fault rating of older distribution switchgear is often 13.1kA (150MVA) compared to a HV design fault level of 250MVA. The installation of a SFCL will be seen to be cost effective when compared to the cost of replacing a primary switchboard and a number of HV switchgear units at distribution substations.</p> <p>The installation of the SCFL in this Project is not immediately required to obviate the need to replace any existing switchgear due to fault level concerns as we believe the existing network could accomodate the current generation proposal. However the installation of the SCFL at this location will both enable Electricity North West to further develop its knowledge and experience, and could enable this network to accept future additional generation without the need for fault level reinforcement investment.</p>
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Attachments:	None.
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