

Network Innovation Competition Full Submission

Supplementary Answer Form

Tick if this answer is Confidential: ☐

Tick if this answer has been provided verbally: ☐

Project code:	SPT EN 01	Question Number	13
Question date	20-08-2013	Answer date	21-08-2013
Submission section question relates to	Section 3.4		
Topic	Technical Description of project		
Question	Please provide a reference and/or further information regarding the ERCOT example of sub-synchronous oscillations between wind farms and series compensation.		
Notes on question			
Answer	<p>The following document from NERC describes the ERCOT event (also attached as "SPT EN 01 – Question 13 – Attachment.pdf"):</p> <p>http://www.nerc.com/pa/rrm/ea/Lessons%20Learned%20Document%20Library/LL20110705_Sub-Synchronous_Interaction.pdf</p> <p>Some further references that may be of interest:</p> <p>http://www.gl-garradhassan.com/assets/downloads/Sub-synchronous_Interaction_in_Wind_Power_Plants_-_Part_II_-_An_ERCOT_Case_Study.pdf</p> <p>http://www.elforsk.se/Global/Vindforsk/Konferenser/HF_symposium_111206/Gotia_Power_V309_subsynchonus_resonence.pdf</p> <p>http://www.uwig.org/CREZ_Reactive_Power_Compensation_Study.pdf (page 11 onwards)</p>		
Attachments			
Verbal Clarifications (Consultants)			