

Network Innovation Competition Full Submission

Supplementary Answer Form

Tick if this answer is Confidential: ☐

Tick if this answer has been provided verbally: ☐

Project code:	NGGTGN01	Question Number	19
Question date	03 October 2013	Answer date	08 October 2013
Submission section question relates to			
Topic			
Question	Please explain, for a new compressor unit, what is the (quantified) value of improvement in (a) flexibility and (b) efficiency provided by the new design.		
Notes on question	The figures quoted in the answer to this question are available in the Fraser Nash report, on page 3.		
Answer	<p>Currently there are no commercially available compressors that provide the functionality that the VECTOR project is seeking to develop to allow us to quantify the improvements in flexibility and efficiency that we could expect.</p> <p>As part of the Innovation Funding Incentive research project into the feasibility of installing VECTOR, Fraser Nash were engaged to prepare a computer simulation based on performance data from a National Grid Gas Transmission compressor and Original Equipment Manufacturer's compressor design.</p> <p>The theoretical model estimates that there will be an increase in flexibility in the range of 10 to 30% of the original envelope of the compressor.</p> <p>The model also predicts that there will be an increase in efficiency of up to 5%, however in practice it would be expected that there would be some losses associated with fluid dynamics that would reduce this figure.</p>		
Attachments			

Verbal Clarifications (Consultants)	
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