

Gary Milne  
Future Networks and Policy  
Scottish & Southern Energy  
Inveralmond House, 200 Dunkeld Road,  
Perth, PH1 3AQ

25<sup>th</sup> April 2013

Dear Gary,

I wish to reassure you that the Modelling and Simulation activities undertaken by the University of Strathclyde on the NINES project will provide statistically valid analysis of the data collected in Shetland. Our team has been modelling the operational aspects of the network at varying levels of domestic demand from 0 up to 1750 homes.

Regarding the DDSM analysis, in the worst case with the scope reduced to the 234 houses owned by Hjaltland Housing Association, to be 85% confident of being within  $\pm 10\%$  of actual energy use will require around 35 houses to be monitored for space heating and around 30 for hot water. We understand from you that more than this number of households has already agreed to participate, so correspondingly for 95% confidence, a sample of 60 "heating" and 50 "hot water" homes would be selected from the respondents to encompass a variety of house types and occupancy profiles.

The positive impact of the phased roll-out involves additional learning potential, including the understanding of the system performance gained from the initial 6-homes trial, which has been used to improve and calibrate the simulation models. I trust you will appreciate that as more data are collected, the accuracy of the models will be verified against field measurements.

Yours sincerely,

George B Bell

*Project Manager, NINES*

*Department of Electronic & Electrical Engineering*

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