Correspondence Reference Number: 32260

1) Upload coupler photos to the external photos exhibit.

Please see uploaded file named QM3G2APLUS Coupler photos.pdf.

2) Is this device used for common mode injection, differential mode injection, or both? Which mode of injection was tested?

The device operates in differential mode and was tested in differential mode.

3) Does this device couple to low voltage lines? If so, how was this tested?

Yes, this device couples to the low voltage lines. The connections on the low voltage lines are direct connections (no use of couplers on the LV side). The connections are illustrated in the installation guide but again they show how they are installed together with the coupling on the MV side not how it was tested (when we tested we separated the injection of MV from that of the LV). The typical installation is that the device is connected to the two secondary phases & neutral (220V). The device gets it power and transmits on these wires. In the typical installation the same device is also connected to the medium voltage (by use of couplers), thus transmitting the signal both on the medium voltage and low voltage.

4) The User's Manual is not clear how the utility would set the notch is there was a complaint on a specific frequency. Please clarify how this would be done.

Please see uploaded file named QM3G2APLUS Mitigation Methodolgy.pdf

5) The overhead testing was done at a power setting of 6 (7 being the highest power setting) and the device is 0.1 dB from the limit. Preliminary data has indicated that a power setting of 4 might be appropriate for overhead lines. Explain the difference in field strength between a power setting of 6 and 4?

I am not aware of any preliminary data for this device operating at power level (4). The previous version of this product line operated at power level (4) but this is a new design. The difference in field strength between each power level is approximately (3) dB.