

TO: Andrew Leimer  
FCC Equipment Authorization Branch

FROM: Dr. David S. Yaney  
CURRENT Group, LLC  
September 5, 2007

Andrew:

I trust the following will address your recent questions regarding our certification submission, FCC ID TY7210-0161, EA717405 (correspondence reference number 33684). Please let me know if any items remain outstanding for you.

1. Since the specific number (0.6 dB) appears in your question we assume that you are referencing the first paragraph under "Conclusion" in section 9.2 of our submitted Report of Measurements, i.e. your concerns are directed at the LV signals.

The internal OFDM engine and associated circuitry generating these signals in this equipment is virtually identical to that used in our URD-R bridge, FCC ID TY7210-1050 that was certified in September 2006. The minor differences of circuitry in the current submission are related only to the use of sharper internal bandpass filters necessary for considerations of system integration and would not be expected to have any deleterious impact on emissions.

In all cases the test conditions used to measure the values reported are such that the OFDM engine generating the LV signals is forced to transmit at the absolute maximum duty cycle transporting unidirectional (UDP) data traffic. This is an extreme test and is rarely, if ever, the case in normal operation. The transmit power is also set at the absolute maximum using an internal carrier-by-carrier capability to flatten the spectrum on-the-wire to the greatest extent possible. Doing this therefore results in a somewhat harsher test than is absolutely required.

We also take considerable care to follow the guidelines of Appendix C, Section 2(c) of the FCC BPL Report and Order precisely. The values reported therefore are absolute maxima identified over frequency and radial position at three unique test sites and the vast majority of that data is under the limits by 2dB or more.

In our opinion, strictly demonstrating compliance under the rigorous burden of these test conditions/methodologies provides more-than-adequate assurance of subsequent compliance of our equipment in normal operation when installed in the field.

2. This device is not specifically part of the (newer) SmartGrid system which we discussed during our recent visit to OET on August 23, 2007. While all systems CURRENT offers for sale are capable of transporting SmartGrid (utility) data, the

system under consideration here provides considerably better performance than is necessary for that purpose alone and would generally be installed only when true broadband transport capability is necessary. We often make the distinction by referring to BPL systems deployed for the sole purpose of transporting electric utility data as “SmartGrid *Only*” or “SGO” systems. Our discussions last month revolved around such an SGO system intended for ubiquitous deployment on both underground and overhead utility MV lines.