

March 6, 2000

Federal Communications Commission

RE: CHP8BUSD5000C, EA96654

Dear Technical Reviewer,

Please accept this letter as an amendment to the certification application of the above-mentioned product.

Thomcast Communications recently submitted the data to certify the equipment, now we would like to submit additional data in order to certify the equipment two ways. Our original report indicates that the equipment will operate at 5-50 watts. Using a QAM modulation scheme with three equally spaced carriers in a channel the equipment will operate at 5-40 watts.

The 1 dB backoff of the total power follows the well known requirements for multi-carrier systems. Specifically, Leffel¹ cites results showing the backoff requirement of 1 dB when signals are increased from two to three carriers. Our laboratory test results reflect the backoff requirement predicated by Leffel. That requirement is incorporated in the rated output power of our transmitter, therefore, using the 64 QAM modulation with three equally spaced carriers our transmitter is rated to 40 watts.

The new data pertaining to the use of three carriers is submitted with this amendment. Please note that the output power in the original test report reads 50 watts average, which is for a single QAM modulation carrier. This field will now include 40 watts average for three equally spaced 64 QAM carriers in a single channel. Also, the label depicted in the FCC ID label/location will be changed to reflect the proper operating range accordingly.

If you require more information to complete the certification of this product in the operating ranges of 5-50 and 5-40 watts, please let me know.

Thank you,



Paulo Correa
Director of Engineering

¹ Leffel, Michael, (Intermodulation Distortion in a Multi-Signal Environment), RF Design, June 1995