

EXHIBIT 1

Overview

The power and out of band emission limits imposed upon the WCS spectrum provide significant protection to the SDARS band.

WCS Wireless proposes to test the effects of operating an OFDM waveform at an average power of 2KW rather than a peak of 2 KW as currently defined in Part 27. We believe that operating at average power will not cause interference or overload to existing SDARS operators. As part of the ongoing cooperation between WCS licensees and SDARS operators, we have agreed to coordinate our test with the adjacent SDARS operator at our proposed experimental site (See Exhibit 2).

The adjacent operator will closely monitor their network during our experiment to assess any impact that might occur. If a negative impact is noted, operation under the experimental license will cease immediately.

Form 442 Section 10a

WCS Wireless has already completed a multi-site test of the network technology within the current Part 27 power rules. These tests were conducted using custom made equipment that meets current FCC Part 27 requirements. These tests were conducted at a power level of 500 W average power, which was necessitated by the fact that the selected OFDM waveform exhibited a momentary peak power 6 dB higher than the average power.

CW, GSM and FM signals have signals which manifest constant envelopes and are therefore always at peak output. Square Root Raised Cosine (SRRC) modulations like QAM and QPSK produce PDFs that are concentrated in the upper half of the range and have peak to average ratios on the order of 3 to 6 dB. Multiple Carrier Modulation (MCM) such as OFDM produce random phasor sums much like random noise, and therefore have Rayleigh distributed envelopes; i.e., $p(E) = 2E \exp(-V_2 E)$. Peak to average ratio is 6 dB for the equipment used in this test.

WCS Wireless wishes to gain an understanding of the real world effect of increasing the power by 6 dB, for an average power of 2 KW at each transmitter. We will accomplish this by measuring signal strength and BER over the same areas we have already characterized. In addition to discovering the coverage and quality improvements for the WCS Wireless network, we will also work closely with the neighboring operator to assure that operation at the higher power has no effect on their system. This will be

accomplished by drive tests to compare coverage and quality on their system before and during our experimental license testing.

Form 442 Section 10b

There are two specific objectives of this experimental license:

- 1). To determine the actual coverage increase provided by the power increase, and
- 2). To assure that the power increase does not affect the service integrity of the neighboring operator.

Form 442 Section 10c

There is currently an open issue about the effect of increased average power on adjacent spectrum. Data collected under this experimental license will provide empirical evidence, which can illustrate these effects. The test results will be specific to the waveforms and receivers under test, however the data should be valuable beyond this specific instance because these results can be extrapolated to other bands and services.