

Open Range Communications Inc. (“Open Range”) hereby respectfully requests Special Temporary Authority (“STA”) to operate on the Globalstar spectrum (2483.5 to 2495 MHz) in accordance with the terms of its existing authority (SAT-STA-20100625-00147) to allow Open Range to test certified WiMAX customer premises equipment in operating configurations not covered by the original equipment certification. The purpose of these tests is to determine whether the equipment, operating as proposed, will improve the performance of Open Range’s system. Open Range proposes to test two configurations that both involve the use of an external/outdoor antenna. First, Open Range proposes to test its existing certified Open Range CPE (FCC ID: MXF-WIXFBR-103) with the addition of an external antenna. This CPE is referred to as the “ORC CPE” for the purpose of this request. Second, Open Range proposes to test outdoor customer premises equipment (FCC ID: V8YF181OD2500W) authorized for use in the frequency range 2505.0-2685.0 MHz, and to operate that equipment at 2490 MHz. This CPE is referred to as the “Outdoor CPE” for the purpose of this request.

These configurations will be tested to determine the degree to which the use of the external/outdoor antenna offsets the effect of the attenuation caused by placing the unit inside a building so that the unit effectively operates as if it were in an outdoor environment continually. In the current configuration, customers located farther from a base station experience substantially lower throughput than customers located near that base station. This is largely due to the fact that, when the system detects a weaker signal from a subscriber unit, the modulation scheme changes from QAM to QPSK. The greater the number of customers who are served via QPSK instead of QAM the lower the overall throughput and efficiency of the cell. Open Range anticipates that the use of an external antenna will permit more customers to be served using the QAM modulation scheme thereby improving service to that customer and the overall efficiency of the cell site. Use of the external/outdoor antenna will also reduce the potential for intra-system interference. Aside from the connection of the external antenna in lieu of the CPE mounted antenna, no other change will be made to the certified Open Range CPE. In addition, aside from the different operating frequency no other change will be made to the certified Outdoor CPE. Except as proposed herein both the Open Range CPE and the Outdoor CPE would continue to conform to all of the technical limitations and rules applicable to ATC CPE devices including, but not limited to, the specific technical parameters set forth in Appendix B of the FCC’s “Equipment Authorization Guidance for Part 25 Transceivers”, dated February 2, 2011, 273109 D01 Equip. Auth. Guide Part 25 TXReceiver V02r02, as well as the technical parameters set forth in 47 C.F.R. § 24.254.

Locations:

Market	Geographic Coordinates of Base Station	Radius within which operation will be conducted
Greenville, SC	N34-49-35 W082-22-47	16
South Bend, IN	N44-15-7 W088-24-38	12
Longmont, CO	N40-9-47 W105-8-12	10
Appleton, WI	N44-15-28 W088-23-41	15