

Routine Licensing for Antennas with Low Power Densities

Pursuant to 25.134(a)(2) of the Rules and Regulations (“Regulations”) of the Federal Communications Commission (“Commission”), the operator of an antenna smaller than 4.5m in the 4/6 GHz frequency bands must demonstrate the unacceptable interference will not be caused to any and all affected adjacent satellites. The proposed antenna in this application is smaller than 4.5m. Hence, a demonstration that interference will not be cause to adjacent satellites is now presented.

Pursuant to 25.134(a) of the Regulation, the maximum digital uplink transmitter power density at the antenna flange permitted is -2.7dBW/4kHz. Based on the performance of the dish and the input power this dish will have a maximum EIRP density at the antenna flange of -15.7 dBW/4kHz, a margin of 13 dB below the requirement.

While this 3.7m dish does not strictly comply with 25.209 of the Regulations, it will meet the power density requirements of 25.134, specifically the power and power density levels will be reduced by the amount it exceeds the required pattern.