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March 1 , 2014

Via ECFS

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions – ET Docket No. 14-14; GN Docket No. 12-268

Dear Ms. Dortch:

QUALCOMM Incorporated ("Qualcomm") is pleased to provide the Commission with input on certain technical parameters that are used in the proposed Methodology for Predicting Potential Interference Between Television and Wireless Mobile Broadband Services in the Appendix to the January 29, 2014 Public Notice in the above-referenced dockets.[1]

Qualcomm's comments focus on two parameters for the wireless LTE User Equipment ("UE") receiver provided in the Appendix. *First*, the assumed UE antenna gain in Tables 6 and 11 of 0 dBi (-2.2 dBd) is exceedingly optimistic for LTE UE that will operate in the 600 MHz band. Qualcomm believes that the antenna gain for 600 MHz LTE UE is constrained by the form factor of today's handheld smartphones and thus is more appropriately set to no more than -6 dBi (and is likely to be several dB lower than that).

Second, the effective noise figure, N_e, of 7.5 dB used in Table 6 of the Appendix should be increased to 9 dB. The 3GPP LTE standard, which the Public Notice properly relies upon, implicitly assumes a 9 dB noise figure for bands that can meet a -100 dBm reference sensitivity level defined for two antennas operating in a 5 MHz LTE channel.

Accordingly, Qualcomm believes that an antenna gain of -6 dBi and a noise figure of 9 dB should be used in place of the numbers in Tables 6 and 11 of the Appendix to the FCC Public Notice to better reflect the performance of an LTE UE that will operate in the 600 MHz band.

Respectfully submitted,

Dean R. Brenner
Senior Vice President, Government Affairs

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[1] *See* FCC Public Notice DA 14-98, Office Of Engineering And Technology Seeks To Supplement The Incentive Auction Proceeding Record Regarding Potential Interference Between Broadcast Television And Wireless Services, ET Docket No. 14-14, GN Docket No. 12-268 (Jan. 29, 2014).