



April 12, 2010

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

Re: *IBFS File No. SES-LIC-20091001-01263*

Dear Ms. Dortch:

In a supplemental submission filed on March 19, 2010, DIRECTV Enterprises, LLC (“DIRECTV”) submitted information that would facilitate coordination in the future should any terrestrial system seek to operate in closer proximity to the 17/24 GHz BSS earth station antenna at its Northwest Uplink facility proposed in the above referenced proceeding.¹ In response to questions from the International Bureau staff, the attachment hereto explains how the information submitted by DIRECTV corresponds to certain subsections of the relevant rule.

If you have any questions, please do not hesitate to contact me.

Respectfully submitted,

/s/

William M. Wiltshire
Counsel to DIRECTV Enterprises, LLC

Attachment

cc: Andrea Kelly
Trang Nguyen

¹ See Letter from William M. Wiltshire to Marlene H. Dortch, IBFS File No. SES-LIC-20091001-01263 (Mar. 19, 2010).

Explanation for Certain Elements of Supplemental Coordination Data

Section 25.203(c)(2)(iv) calls for antenna gain pattern(s) in the plane of the main beam. Given that the intent of this subsection is to establish potential off-axis EIRP levels that could affect terrestrial systems deployed in the future, a conservative estimate of the gain pattern should be used. The 9.2-meter feeder link antenna that is the subject of this application is compliant with Section 25.209, as stated on the supplemental coordination data sheet. The antenna off-axis gain envelope of that section is well understood and easily referenced for future coordinations. It was also the basis used by DIRECTV in deriving the coordination distances provided on the data sheet.

Section 25.203(c)(2)(vi) calls for a horizon elevation plot. Section 25.203(b) states that this plot “may also be submitted in tabular numerical format at 5° azimuthal increments instead of graphical format.” This is precisely the data that was provided in the column labeled “Horizon Elevation Angle” on the supplemental coordination data sheet.

Section 25.203(c)(2)(vii) calls for antenna horizon gain plots determined in accordance with Section 25.251 for the satellite longitude range specified in Section 25.203(c)(2)(v). Section 25.251, in turn, provides that technical aspects of coordination should be based on Appendix 7 of the ITU Radio Regulations. DIRECTV used the method set forth in Annex 3 of Appendix 7, titled “Antenna Gain Towards The Horizon For An Earth Station Operating With A Geostationary Satellite,” to determine the angular separation between the earth station pointing direction and the azimuth of interest. This angular separation is listed in the column labeled “Antenna Disc. Angle” on the supplemental coordination data sheet. This angular separation was then used with the antenna gain mask of Section 25.209, rather than the antenna gain pattern assumed in Appendix 7 of the Radio regulations, to establish gain along the azimuth of interest, and this gain is shown in the column labeled “Antenna Gain.” Here again, as permitted under Section 25.203(b), DIRECTV supplied this information in tabular rather than graphical form.

Section 25.203(c)(2)(xii) calls for a plot of great circle coordination distances and rain scatter coordination distance contours. Again providing this information in tabular rather than graphical form, the data is set forth in the rightmost column labeled “Coordination Distance.” Because Section 25.203(l)(2) specifies that free space propagation conditions should be assumed in calculating power flux density at the license area boundary of a 24 GHz fixed service licensee, DIRECTV did not submit additional data that include the effect of rain scatter.