

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
115 License Subsidiary, LLC)	File No. SAT-MOD-2012_____
)	
Application to Modify 115° W.L. 17/24 GHz)	
Broadcasting Satellite Service Authorization)	Call Sign: S2700
_____)	

MODIFICATION

115 License Subsidiary, LLC (“115 License Sub”) files this modification to provide the predicted transmitting antenna off-axis gain information for 115 License Sub’s 115.0° W.L. 17/24 GHz Broadcasting Satellite Service (“BSS”) authorization (Call Sign S2700). Pursuant to recently released rules, current authorization holders are required to file a modification application to supplement the file with all required information.¹ This application has been filed electronically as an attachment to FCC Form 312. The remaining technical information in 115 License Sub’s current authorization is unchanged and is incorporated by reference.²

¹ 47 C.F.R. § 25.264(a). *See also International Bureau Announces Effective Date for New Information Requirements in the 17/24 GHz Broadcasting-Satellite Service and Establishes Filing Deadline for Pending Applications and Current Authorizations*, Report No. SPB-239, DA 12-71 (Jan. 20, 2012) (Public Notice) (requiring each current 17/24 GHz BSS authorization holder to file a conforming modification to its authorization no later than March 15, 2012).

² Stamp Grant, File Nos. SAT-LOA-20060412-00044, SAT-AMD-20080114-00023 (granted December 17, 2008).

New Section 25.264(a) requires the submission of predicted transmitting antenna off-axis antenna gain information:

- (1) In the X-Z plane, i.e., the plane of the geostationary orbit, over a range of 30 Degrees from the positive and negative X-axes in increments of 5 degrees or less.
- (2) In planes rotated from the X-Z plane about the Z-axis, over a range of up to 60 degrees relative to the equatorial plane, in increments of 10 degrees or less.
- (3) In both polarizations.
- (4) At a minimum of three measurement frequencies determined with respect to the entire portion of the 17.3-17.8 GHz frequency band over which the space station is designed to transmit: 5 MHz above the lower edge of the band; at the band center frequency; and 5 MHz below the upper edge of the band.
- (5) Over a greater angular measurement range, if necessary, to account for any planned spacecraft orientation bias or change in operating orientation relative to the reference coordinate system. The applicant must also explain its reasons for doing so.

115 License Sub submits the requested antenna data predictions for its space station in the attached technical materials.³ The required information is produced for a CONUS beam and a Mexico beam. Consistent with the new rule, for the CONUS beam, the predictions were made in both polarizations (*i.e.*, RHCP and LHCP) at three measurement frequencies in the 17.3-17.7 GHz frequency band over which its proposed space station is designed to transmit.⁴ For the

³ Because 115 License Sub does not plan for any spacecraft orientation bias or change in operating orientation relative to the reference coordination system, it does not provide predictions over a greater angular measurement range as specified in Section 25.264(a)(5). *See* 47 C.F.R. § 25.264(a). Similarly, because the power flux density of 115 License Sub's proposed space station will not exceed the coordination trigger of -117 dB W/m²/100 kHz at the location of any prior-filed U.S. DBS space station, 115 License Sub has not provided the calculation otherwise required in Section 25.264(b). *See* 47 C.F.R. § 25.264(b).

⁴ The attached technical materials for the CONUS beam note frequencies 17.3 GHz, 17.5

Mexico beam the predictions were made in both polarizations at three measurement frequencies in the 17.7-17.8 GHz band, which are the only frequencies operated for this beam.⁵ The data is calculated over a range of +/- 30 degrees from the X axis in the X-Z plane, and over a range of +/- 60 degrees in planes rotated about the Z axis. In addition, consistent with Sections 25.114(d)(18) and 25.264(h)(2) of the Commission's rules,⁶ 115 License Sub will maintain the maximum orbital eccentricity to less than 3.1×10^{-4} .

For the foregoing reasons, 115 License Sub requests that its authorization be modified to include the attached transmit antenna off-axis gain information.

Respectfully submitted,

115 License Subsidiary, LLC

By: /s/ Scott Blank

Scott Blank
Senior Vice President, General Counsel,
and Secretary

March 15, 2012

(Continued . . .)

GHz, and 17.7 GHz that have been rounded. The actual measurement frequencies are 17.305 GHz, 17.5 GHz, and 17.695 GHz.

⁵ The attached technical materials for the Mexico beam note frequencies 17.7 GHz, 17.75 GHz, and 17.8 GHz that have been rounded. The actual measurement frequencies are 17.705 GHz, 17.75 GHz, and 17.795 GHz.

⁶ 47 C.F.R. §§ 25.114(d)(18) & 25.264(h)(2).

ENGINEERING CERTIFICATION

The undersigned hereby certifies to the Federal Communications Commission as follows:

- (i) I am the technically qualified person responsible for the engineering information contained in the foregoing Application;
- (ii) I am familiar with Part 25 of the Commission's rules; and
- (iii) I have either prepared or reviewed the engineering information contained in the foregoing Application, and it is complete and accurate to the best of my knowledge and belief.

Signed:

/s/ Milenko Stojkovic

Milenko Stojkovic
Senior Engineer
W.L. Pritchard & Co., L.C.

March 15, 2012