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BY HAND

RECEIVED

November 14, 2003

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Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
c/o Natek, Inc., Inc.
236 Massachusetts Avenue, N.E.
Suite 110
Washington, DC 20002

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Int'l Bureau
NOV 17 2003
Front Office

Re: Reply of Tripoint Global, Inc. regarding Opposition and Response of SWE-DISH Satellite Communications, Inc. Earth Station Application, FCC File No. SES-LIC-20030910-01236

Dear Ms. Dortch,

Pursuant to Section 25.154(d) of the Commission's Rules, 47 C.F.R. § 25.154(d), Tripoint Global, Inc. ("Tripoint") hereby files its Reply to the Opposition and Response of SWE-DISH Satellite Communications, Inc. ("SWE-DISH"), filed on November 6, 2003, regarding the above-referenced earth station application ("Application").¹

Tripoint has reviewed the supplemental information provided by SWE-DISH in its Opposition. However, based on the information supplied to date, it is impossible for Tripoint, or the Federal Communications Commission ("Commission" or "FCC"), to make any determination of compliance with the Commission's rules and regulations of non-interference for non-conforming antennas. To illustrate this point, a number of inconsistencies remain in the above-referenced Application.

The first of these concerns is the lack of compliance with Sections 25.209 and 25.212 of the Commission's Rules, 47 C.F.R. §§ 25.209, 25.212. With respect to Section 25.209, the

¹ Opposition and Response of SWE-DISH Satellite Communications, Inc., FCC File No. SES-LIC-20030910-01236 (Nov. 6, 2003)("Opposition"). Tripoint filed Comments to the Application on October 24, 2003. See Comments of Tripoint, FCC File No. SES-LIC-20030910-01236 (Oct. 24, 2003)("Tripoint Comments").

SWE-DISH antenna violates the sidelobe envelope at +/- 1.25 degrees from beam peak by 3.1 dB. The FCC has employed the waiver process, which in essence requires the power input to the antenna to be backed off from the -14 dBW / 4KHz (ref. 47 C.F.R. § 25.212) by an amount that the antenna exceeds the mask defined in Section 25.209 of the Rules. For the proposed bandwidth, this would effectively limit the maximum input power to the antenna flange to 9.7 watts. Depending on what submittal one cares to review, the SWE-DISH input power could actually vary from 12.6 watts to 26.9 watts. This clearly exceeds the FCC's limits.

A second concern addresses Radiation Safety. The FCC Bulletin establishes safe limits for non ionizing radiation at 1 mW/cm². According to the SWE-DISH analysis, this level will be exceeded by a factor (worst case) of more than 400. For this analysis, SWE-DISH appears to have assumed an input power of 12.1 watts. If the maximum advertised power level were employed, the maximum power density would approach 942 mW/cm². This is excessive by any standard compared to the 1 mW/cm² limit. To meet this requirement in other situations, applicants were required to include a design provision that cut the transmitter power when the terminal lost its downlink signal.

A third area of concern is the inherent pointing accuracy associated with the terminal. It is assumed that the terminal will utilize changes in the received signal strength to complete the final alignment. Because of the "flatness" of the antenna pattern around beampeak, it is highly unlikely the field alignment can be accomplished with an accuracy of better than +/- 0.4 degrees. This results in potentially severe interference implications for adjacent satellites in a 2-degree spacing scenario.

Because the burden of demonstrating compliance with the Commission's requirements is on SWE-DISH, the Application should be denied until this showing is made. In the past, the FCC has required complete sets of patterns to be submitted often approaching 100 patterns at three frequencies and two polarizations to be submitted. These patterns have been required over the full +/- 180 azimuth ranges and by as much as practical in the elevation – usually +/- 30 degrees as a minimum.

We understand that SWE-DISH will be amending the Application, and Tripoint hopes that such amendment will contain the information needed for a reasoned analysis. For example, in order for interference to be determined for non-conforming antennas, accurate antenna performance patterns throughout the orbital arc are needed. Several patterns with mathematical extrapolations are not sufficient.² At a minimum, SWE-DISH should provide measured antenna pattern data for angle increments of ~ 0.1 degrees, which is the norm for modern range data acquisition systems. Contrary to SWE-DISH's assertion, this is a practical measurement and would eliminate doubt about pattern performance and interference across orbital arc. Further, SWE-DISH should provide the exact method used to ensure pointing accuracy. Absent extraordinary circumstances, this should be automatic or an operator should be required to be on duty.

² See Opposition at Attachment A, p. 2.

Ms. Dortch, Secretary
November 14, 2003
Page 3

Tripoint believes that any other approach should be treated as a "Request for Special Temporary Authority" where the Commission keeps control over the authorized use of the antenna, and where procedures are in place for immediate notification and cessation of operations in case of unacceptable levels of interference.

Accordingly, Tripoint continues to object to the grant of the Application until such time as SWE-DISH provides the additional information necessary to demonstrate compliance. Tripoint is looking to the FCC to ensure that the SWE-DISH application is held to the same high standards that the FCC has levied on other applicants for VSAT antenna systems and terminals.

Please file-stamp and return a copy of this filing in the pre-addressed, stamped envelope provided for this purpose. Kindly direct questions concerning this filing to the undersigned.

Regards,

A handwritten signature in cursive script, appearing to read "Marvin Shoemake".

Marvin Shoemake
Executive Vice President, Tripoint Global, Inc.

cc: Maury J. Mechanick, White & Case, LLP
Joseph A. Godles, Goldberg, Godles, Wiener & Wright
William K. Coulter, Coudert Brothers
Colin Robinson, Tripoint Global, Inc.