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FILED ELECTRONICALLY

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Notice of Oral *Ex Parte* Presentation, Comprehensive Review of the Licensing and Operating Rules for Satellite Services, IB Docket No. 12-267

Dear Ms. Dortch:

On May 11, 2015, representatives of SES Americom, Inc. ("SES") met to discuss the above-referenced proceeding with the following International Bureau Staff: Jose Albuquerque, Clay DeCell, Stephen Duall, Chip Fleming, Diane Garfield (participating by telephone), Jennifer Gilsenan, and Kerry Murray. The SES representatives were Nancy Eskenazi, Kimberly Baum, and Karis Hastings, outside counsel to SES. The discussion focused on a number of the issues raised in SES's comments and reply comments in the Part 25 review proceeding.¹

Two-Degree Spacing

Public Interest Rationale for Two-Degree Spacing: SES urged the Commission to maintain two-degree spacing and to increase the baseline power levels to correspond with the typical operational levels of today's spacecraft. SES emphasized that the two-degree spacing policy serves an important public policy objective – maximizing efficient use of the orbital arc for service to U.S. customers. Two-degree spacing facilitates new entry by providing a predictable baseline at which parties can operate prior to completing coordination with their neighbors. SES expressed concern that absent the two-degree spacing framework, new entry could be blocked indefinitely by incumbents based on conservative ITU coordination criteria. Furthermore, without a baseline to guarantee reasonable operating levels for new entrants, two-degree spacing would become a historical construct between operational spacecraft, competition would be stifled across the arc as replacement satellites would not be able to increase in power or add spectrum without coordinations that often take years to complete, and expansion of service to U.S. consumers would be thwarted.

SES noted that it is not surprising that Intelsat is the sole party arguing for elimination of two-degree spacing; since Intelsat's ITU filings are among the oldest in the world, relying on ITU

¹ Joint Comments of SES Americom, Inc. and New Skies Satellites B.V., IB Docket No. 12-267 (filed Jan. 29, 2015); Joint Reply Comments of SES Americom, Inc. and New Skies Satellites B.V., IB Docket No. 12-267 (filed Mar. 2, 2015).

priority instead of two-degree spacing would benefit Intelsat at the expense of new entry. However, none of Intelsat's arguments is persuasive. For example, the success of two-degree spacing in increasing available orbital locations for domestic satellites is a reason to preserve, not abolish, the policy. As the arc becomes more congested, a policy that facilitates utilization of the remaining orbital locations by setting baseline operational criteria is even more critical.

Similarly, it is clear that two-degree spacing does not disadvantage U.S. licensees. The Commission's practice is to require both U.S. licensees and foreign licensees seeking U.S. market access to comply with the two degree spacing framework, an even-handed approach that is consistent with U.S. trade obligations and enhances competition in the U.S. satellite services market. Furthermore, in recent decisions the Commission has made clear that two-degree spacing policy does not constrain U.S. licensees vis-à-vis foreign licensees with regard to operations with no U.S. market access.² In light of this precedent, SES noted that there is no logical basis for Intelsat's argument that the Commission should limit the scope of two-degree spacing by applying it only to beams with full-CONUS coverage. The Commission has never suggested that operational rules for satellite service are triggered only if an operator has full-CONUS coverage, and there is no justification for such an approach in the context of two degree spacing.

SES also refuted Intelsat's suggestion that requiring foreign-licensed satellite operators to comply with two degree spacing as a condition of U.S. market access might be inconsistent with U.S. treaty obligations. SES noted that the Commission has always required foreign licensees seeking U.S. market access to conform to two-degree spacing requirements, as well as other FCC technical rules. To SES's knowledge, no foreign licensee has challenged that approach under applicable treaty language. If the Commission were to accept Intelsat's argument and find that it cannot require foreign licensees serving the U.S. to comply with two-degree spacing, SES asked how the Commission would justify continuing to require foreign licensees to obey other FCC operational mandates.

SES also observed that contrary to Intelsat's suggestion, SES's arguments regarding ITU priority in the context of the SES-3 application do not undercut the rationale for two-degree spacing. Instead, Intelsat's reference to SES-3 is a red herring. As the Commission is aware, the issues raised in SES-3 involved rights for 17/24 GHz BSS (which are not subject to two-degree spacing rules), and both parties were seeking the same nominal orbital location. The two-degree framework cannot resolve such competing spectrum claims at a single orbital location, and relying instead on ITU priority in such cases is fully consistent with Commission precedent.

SES emphasized that its overriding goal is predictability. Applying the two-degree spacing framework provides certainty regarding the ability to access new orbital locations without requiring open-ended coordinations between competitors that can take many years to complete. Similarly, in cases involving spectrum rights at less than two-degree spacing, Commission adherence to ITU priority policies and regulations is essential to ensure fair and consistent decisions concerning U.S. market access.

Two degree spacing should be expanded to other FSS bands: SES argued that the same public interest rationale for two degree spacing in conventional C- and Ku-band spectrum

² See *DIRECTV Enterprises, LLC*, Order and Authorization, DA 15-218 (rel. Mar. 4, 2015); *Intelsat License LLC*, Order and Authorization, DA 15-378 (rel. Mar. 26, 2015).

applies with equal force to FSS operations in the extended, unplanned C- and Ku-band segments (3625-3700 MHz, 5850-5925 MHz, 6425-6725 MHz, 10.95-11.2 GHz, 11.45-11.7 GHz, and 13.75-14 GHz) as well as to the planned Ku-band (10.7-10.95 GHz, 11.2-11.45 GHz, and 12.75-13.25 GHz).

Two-degree power levels should be increased to reflect modern satellite systems: SES emphasized that a critical aspect of maintaining two-degree spacing as a useful mechanism is to increase the baseline levels so that they align with spacecraft being implemented today. Otherwise, unnecessary coordinations must be undertaken and newcomers are limited to very restrictive levels. Specifically, SES recommended setting the Ku-band EIRP downlink level at 13 dBW/4kHz and the C-band EIRP downlink level at 3 dBW/4kHz.

SES has revised its view of the “new entrant problem”: SES recognized that concerns can arise regarding applying the two-degree spacing rules to situations in which a new entrant commences operations adjacent to a satellite already operating at levels above those defined in the two-degree spacing framework. As a threshold matter, SES noted that this problem highlights the need to update the two-degree levels – conforming the baseline levels to reflect modern spacecraft parameters will mitigate “new entrant” concerns by reducing the gap between the default two-degree levels and the levels routinely in use on today’s spacecraft.

SES stated that it continues to support a change to the two-degree framework to provide greater certainty for an existing operator by allowing it to maintain coordinated levels that are higher than the two-degree default levels notwithstanding entry by a new two-degree neighbor. SES agreed that there should be a clear and open process for the incumbent operator to define its current operating levels, with that information publicly available to other parties.

SES previously suggested that a new entrant should be permitted to operate at, but not above, the two degree benchmarks absent coordination, but SES is concerned that under such an approach an incumbent would have no incentive to accommodate a new entrant seeking to operate above the two-degree levels. Furthermore, as technology develops, it is likely that typical satellite operating levels will again be significantly above the two-degree spacing benchmark levels. SES suggested that the Commission consider whether a new entrant arriving as a neighbor to an incumbent operating at above two-degree levels should be allowed to operate at levels halfway between the two-degree levels and the incumbent’s operating levels.

SES does not support any change to the Commission’s policies to allow an incumbent to block adjacent entry in order to protect operations that are especially sensitive to interference. SES has weighed the trade-offs between the certainty provided by two-degree spacing (for both new entrants and expanded services on replacement satellites) and the greater flexibility to accommodate smaller earth station antennas that would result if existing operators could maintain a higher degree of protection from new entrants. SES seeks to accommodate on our satellites the same new services with smaller, more sensitive antennas that other parties propose to provide. However, after careful review, SES determined that the benefits of access to additional orbital and spectrum resources under the two-degree spacing framework outweigh the advantages of being able to acquire additional interference protection from new two-degree neighbors.

Proposed rule change on certifying coordination: SES urged the Commission to review the rule language proposed to implement the ability to provide a coordination certification in lieu of an interference analysis to demonstrate two-degree operating compatibility. In particular, SES emphasized that the proposed changes to Section 25.140 should recognize that at the time an

application is filed, it is likely that coordination efforts will be ongoing, and the applicant will not be in a position to certify that it has completed coordination with all its neighbors.

Filing ITU Materials Before FCC Application

SES reiterated its support for allowing satellite network materials to be forwarded to the ITU in advance of the filing of an FCC license application but urged the Commission to implement measures to avoid abuse of this process and deter attempts to warehouse spectrum and orbital resources. In particular, SES contended that the Commission should allow a prospective applicant to retain priority in the queue only if it files a completed application within 90 days following submission of ITU materials. SES contended that a 90-day period is sufficient to prepare the application, and observed that this limited window in which a prospective applicant has exclusivity for spectrum and orbital resources would eliminate the need for a surety bond at the ITU filing stage. If the Commission were to adopt a longer period of exclusivity before an application is required to be filed, SES argued that a substantial bond would be needed to deter speculators.

SES also emphasized that the Commission will need to set limits on the number of ITU submissions that a party could request in a given time period and apply a “three strikes rule” or some other measure to prevent abuse of the process by parties seeking to tie up spectrum through multiple ITU filings without intending to seek a license. In addition, SES suggested that the Commission clarify that its change in the procedures for submitting ITU materials will not affect its long-established policies on international coordination and U.S. market access for foreign licensed satellites. In particular, a request by a prospective U.S. applicant for submission of ITU materials cannot block a later market access request by a foreign licensee with ITU priority.

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SES argued that it is critical to maintain the current approach in which FDMA and TDMA systems are not subject to a reduction in off-axis EIRP density because many customers need to operate at the Section 25.218 or 25.138 levels in order to maintain desired throughput. This is especially true for very small aeronautical antennas that need to take advantage of increased spot beam G/T.

SES suggested that there are a number of mitigating factors that need to be considered. For example, the receive gain of CONUS satellites rolls off across the service area, so transmissions in multiple spot beams will not be received at the same level. Many coordination agreements take this roll-off into account, and allow an increase in uplink power at a specified gain contour of the victim satellite. Furthermore, the traffic loading and demand varies. With aeronautical services, for example, the activity factor for how many beams are active at any given time on any given frequency depends on the usage on the planes in transit at the time, the time of day, and the type of application. SES advised the Commission that it is working on an analysis that takes these factors into account.

Permitted Space Station List Expansion

SES urged the Commission to expand the Permitted Space Station List to encompass all GSO space stations that have been licensed by the Commission or authorized to serve U.S. customers. This change will facilitate competition by providing a unified list of satellites available for U.S. service without undermining the Commission’s ability to impose conditions to address band-specific coordination requirements or technical standards.

Bond and Milestone Issues

SES reiterated its view that an escalating bond is worth considering to encourage the return of unused spectrum and orbital resources sooner rather than later. SES urged the Commission to streamline the milestone review process by establishing clear requirements for milestone showings and minimizing requirements to collect competitively-sensitive materials.

Please contact the undersigned if you have any questions.

Respectfully submitted,

/s/ Karis A. Hastings

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