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

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Federal Communications Commission Office of Secretary

In the Matter of

SPECTRUM FIVE LLC

Petition for Declaratory Ruling To Serve the U.S. Market Using BSS Spectrum from the 114.5° W.L. Orbital Location File Nos. SAT-LOI-20050312-00062 SAT-LOI-20050312-00063 Received

MAY 1 9 2005

Policy Branch International Bureau

OPPOSITION OF DIRECTV ENTERPRISES, LLC

DIRECTV Enterprises, LLC ("DIRECTV") hereby opposes the above-captioned Petition for Declaratory Ruling ("S5 Petition") filed by Spectrum Five LLC ("Spectrum Five"). The S5 Petition is but one of a growing number of proposals that would create new orbital locations for providing Broadcast Satellite Service ("BSS") from orbital locations spaced less than nine degrees from slots currently used to provide such service to tens of millions of consumers in the United States.

As DIRECTV has demonstrated in other proceedings, however, implementation of such "tweener" operations as currently proposed by Spectrum Five would have a significant impact on current and future services available from the BSS locations allocated to the United States under the International Telecommunications Union's ("ITU") Region 2 Plan. The S5 Petition suffers from the same infirmities. Thus, as a procedural matter, the S5 Petition is subject to dismissal for failure to comply with Section 25.114(d)(13)(i) of the Commission's rules, which requires applicants seeking to use assets not specified in the BSS Plan to provide a sufficient technical showing that the

proposed system could operate satisfactorily if all assignments in the BSS Plan were implemented. Spectrum Five has not yet even attempted to coordinate its proposed system with DIRECTV – and Spectrum Five's own technical analysis demonstrates how difficult such a coordination would be. More importantly, DIRECTV continues to believe that this and other proposals for new "tweener" BSS slots that provide less than the current nine degree spacing upon which U.S. BSS operators have relied should be considered, if at all, in a comprehensive rulemaking proceeding.¹

DISCUSSION

Spectrum Five requests authority to provide BSS service in the United States from two satellites licensed by the Netherlands operating at the 114.5° W.L. slot. In a very fundamental sense, the S5 Petition is not new or unique. Rather, it is merely the latest proposal to create a new BSS orbital location near existing locations allocated to the U.S. under the Region 2 BSS Plan. As DIRECTV has documented in other proceedings, such proposals are substantively unworkable, gravely detrimental to the operations and growth of U.S. DBS providers, and contrary to the public interest.² Rather than repeating all of those arguments and technical showings, DIRECTV hereby incorporates them by reference. Nonetheless, a few observations specific to the S5 Petition are in order, and are made below.

First, Spectrum Five's own technical analysis vividly demonstrates the magnitude of the potential interference problem its proposal would create for operational U.S. DBS

DIRECTV has proposed such a rulemaking. See DA 03-3903 (rel. Dec. 16, 2003)(calling for comment on DIRECTV request for rulemaking and related applications).

DIRECTV and its affiliates have made numerous filings in two other proceedings related to short-spaced BSS orbital locations – Rep. No. SPB-196 and FCC File No. SAT-PDR-20020425-00071 – all of which are incorporated by reference herein.

systems. Exhibit 1 to the Technical Appendix lists the maximum equivalent protection margin ("EPM") degradation for each affected DBS satellite network. As a point of reference, the coordination trigger in AP30 Annex 1, Section 2 (MSPACE) used by the ITU to analyze satellite interference in Region 2 is an OEPM (Overall Equivalent Protection Margin) degradation of 0.25 dB. The data in the S5 Petition show 22 beams in U.S. filings at the 119° W.L. and 110° W.L. orbital locations that would experience degradation of *more than 10 dB*, and many more of between 5 dB and 10 dB.³

Spectrum Five attempts to ameliorate the impact of such significant degradation figures by explaining away a handful of examples as anomalous, but even that effort provides little comfort.⁴ In fact, the U.S. ITU filing that Spectrum Five describes as a "more representative example of the interference situation" – USABSS-18 at 119° W.L. – illustrates the potential for severe interference. Spectrum Five asserts that the "worst-case degradation calculated by MSPACE is 2.6 dB for transponder 4 of beam 23." However, the MSPACE analysis provided in the S5 Petition shows degradation of over 4 dB for two beams and over 10 dB for two others in the USABSS-18 filing. Thus, far

³ See S5 Petition, Exhibit 1 to Technical Appendix, Attachment 2 ("Attachment 2), at pp. 4-15.

For example, Spectrum Five focuses on the 16.7 dB degradation for beam 7563 of the USABSS-15 filing at 110° W.L., claiming it is anomalous because the affected test points are in a Hawaii beam and use only a single DBS channel. See S5 Petition, Exhibit 1 to Technical Appendix, Attachment 1 ("Attachment 1"), at p. 6. However, Spectrum Five fails to explain the comparable 16.8 dB degradation for beam 7503 of USABSS-15, which uses ten DBS channels, or 16.6 dB degradation for beam 7499 of USABSS-15, which uses five DBS channels – not to mention the nine other beams with more than 10 dB degradation. See Attachment 2 at pp. 13-15.

⁵ Attachment 1 at p. 6.

⁶ Id.

See Attachment 2 at p. 7 (10.97 dB for one transponder on beam 9044; 10.53 dB for six transponders on beam 9042; 4.92 dB degradation for one transponder on beam 9045; and 4.79 dB degradation on six transponders on beam 9043). It is also worth noting that Table 2 of Attachment 1 indicates a worst-case OEPM degradation for USABSS-18 of 11.8 dB.

from allaying concerns, even the example offered by Spectrum Five as a fair indicator of the interference environment demonstrates the severity of the problem.

Nonetheless, Spectrum Five concludes that "[t]hese results indicate a promising sharing situation" and that "coordination with affected parties will be readily achievable." Needless to say, DIRECTV does not share Spectrum Five's optimism. But in any event, at present there is no coordination agreement between Spectrum Five and DIRECTV – indeed, to DIRECTV's knowledge, neither Spectrum Five nor its licensing administration has even requested negotiation. Given the significant interference that would result from the operations proposed by Spectrum Five, the Commission should not blithely assume that coordination is likely, or even possible. Rather, unless and until such an agreement is reached with all U.S. DBS operators, Spectrum Five's application is not ripe and should be denied.

Second, Spectrum Five asserts that the "provision of BSS from satellites spaced substantially less than nine degrees apart is already common in Europe." In support of this assertion, it cites SES Astra's operation of satellites with four to five degree spacing. DIRECTV previously addressed this argument when it was made by SES Americom last year in support of another petition to provide service in the U.S. from a short-spaced BSS orbital location. DIRECTV first showed that the satellites in question were not providing co-frequency BSS/DTH service, and then used field measurements to demonstrate that the interference environment in Europe is not nearly as problematic as

⁸ Attachment 1 at p. 7.

⁹ S5 Petition at p. 6.

¹⁰ Id. at p. 4.

¹¹ Technical Appendix at 12-13.

the environment that would be created by a short-spaced BSS orbital location over the U.S. 12 The specious "Europeans already short-space" argument should be no more availing for Spectrum Five than it was for SES Americom.

Third, Spectrum Five has requested a partial waiver of the requirement under Section 25.114(d)(3) of the Commission's rules to provide a full set of antenna beam diagrams in ".gxt" format, because doing so "would be unnecessarily burdensome." Instead, it has provided a text file with information on its beams, as well as a Microsoft Access ".mdb" file with certain system characteristics. Unfortunately, the information submitted is not sufficient to allow interested parties such as DIRECTV to perform a complete analysis of potential interference from the proposed satellite. GXT files are the common format used with the ITU's GIMS and MSPACE software packages to analyze interference scenarios, and in fact Spectrum Five must have generated them in order to conduct the MSPACE analysis summarized in its filing. Providing them here would not be burdensome, as demonstrated by the fact that DIRECTV submitted .gxt files (both copol and cross-pol) for each of its three BSS spot beam satellites (DIRECTV 4S, DIRECTV 7S, and DIRECTV 9S). Since interference concerns are likely to be the most significant issue in this proceeding, such information is particularly important here.

DIRECTV has repeatedly demonstrated that "tweener" proposals would cause significant interference to existing and future operations of BSS systems serving millions of U.S. subscribers. Spectrum Five's recent addition to the growing list of such proposals

See Letters from William M. Wiltshire to Marlene H. Dortch, Rep. No SPB-196/SAT-PDR-20020425-00071 (dated July 23, 2004 and Sept. 8, 2004).

S5 Petition, Addenda to Schedule S and Requests for Partial Waivers, at p. 4.

is no different. Indeed, the S5 Petition itself demonstrates as much. DIRECTV again urges the Commission to address the issues related to "tweener" operations, if at all, in a comprehensive rulemaking.

DIRECTV does not oppose the entry of a new source of competition in the multichannel video programming distribution market – though Spectrum Five apparently does not itself intend to offer such services. He are other means to achieve such entry that would not place at risk the substantial investment that existing U.S. BSS operators have made in their systems or frustrate the expectations of U.S. consumers that such systems will, like their cable competitors, continually improve their video offerings. For example, the Commission has allocated spectrum for BSS service in the "expansion" frequencies at 17 GHz. Under these circumstances, and for the reasons stated herein, DIRECTV submits that the public interest would not be served by granting the S5 Petition, and requests that the Commission deny it.

Respectfully submitted,

DIRECTV ENTERPRISES, LLC

By:

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Dated: May 16, 2005

Spectrum Five "intends to make its services available to other DBS providers," including the incumbents. S5 Petition at pp. 14-15.

ENGINEERING CERTIFICATION

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

- I am the technically qualified person responsible for the engineering information contained in the foregoing Opposition,
- (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 Opposition, and it is complete and accurate to the best of my knowledge and belief.

Signed:	
/s/	
David Pattillo	
May 16, 2005	
Date	

CERTIFICATE OF SERVICE

I hereby certify that, on this 16th day of May, 2005, a copy of the foregoing Opposition of DIRECTV Enterprises, LLC was served by hand delivery upon:

> Richard E. Wiley Todd M. Stansbury Wiley Rein & Fielding LLP 1776 K Street, N.W. Washington, DC 20006

> > Jennifer Anselmo