

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

In the Matter of)	
)	
DIRECTV Enterprises, LLC)	File Nos. SAT-LOA-20060908-00100
Application for Authorization to Launch and)	SAT-AMD-20080114-00014
Operate DIRECTV RB-2, a Satellite in the)	SAT-AMD-20080321-00077
17/24 GHz Broadcasting Satellite Service)	
at the 102.825° W.L. Orbital Location)	Call Sign: S2712
)	
Spectrum Five LLC)	
)	File No. SAT-LOI-20081119-00217
Petition for Declaratory Ruling to Serve the)	SAT-AMD-20120314-00044
U.S. Market from the 103.15° W.L. Orbital)	
Location in the 17/24 GHz Broadcasting)	Call Sign: S2778
Satellite Service)	

CONSOLIDATED REPLY TO OPPOSITION TO APPLICATION FOR REVIEW

Spectrum Five LLC (“Spectrum Five”) replies to the Oppositions¹ filed by DIRECTV Enterprises, LLC (“DIRECTV”) to Spectrum Five’s Application for Review of the Order on Reconsideration issued by the International Bureau (“Bureau”) in the above-captioned proceeding.² Nothing in DIRECTV’s Oppositions masks the reversible errors in the Bureau’s Order or the fundamental failure by DIRECTV to comply with clearly delineated application requirements and unambiguous power levels.³

¹ DIRECTV Enterprises, LLC, Opposition to Application for Review, File Nos. SAT-LOA-20060908-00100, SAT-AMD-20080114-00014, SAT-AMD-20080321-00077, Call Sign: S2712 (filed Jul. 17, 2012) (“DIRECTV Application Opposition”); DIRECTV Enterprises, LLC, Opposition to Application for Review, File Nos. SAT-LOI-20081119-00217 and SAT-AMD-20120314-00044, Call Sign: S2778 (filed Jul. 17, 2012) (“Spectrum Five Application Opposition”).

² *DIRECTV Enterprises, LLC, Application for Authorization to Launch and Operate DIRECTV RB-2, a Satellite in the 17/24 GHz Broadcasting Satellite Service at the 102.825° W.L. Orbital Location and Spectrum Five LLC, Petition for Declaratory Ruling to Serve the U.S. Market from the 103.15° W.L. Orbital Location in the 17/24 GHz Broadcasting Satellite Service*, Order on Reconsideration and Declaratory Ruling, DA 12-861 (May 31, 2012) (“Order on Reconsideration”).

³ In the Spectrum Five Application Opposition, DIRECTV questions Spectrum Five’s compliance with the pleading requirements of Section 1.115(b). To the contrary, Spectrum Five unquestionably identified the “factor(s) which warrant Commission consideration” (*i.e.*, the Bureau’s erroneous findings of fact and law) that created the only fact causing Spectrum Five’s

DIRECTV was obligated by law affirmatively to “provide the appropriate technical showings to support its proposed operations.”⁴ Indeed, even DIRECTV admits that the Commission will dismiss an application that fails “to provide an analysis called for under the Commission’s rules.”⁵ As demonstrated in Spectrum Five’s Application for Review, DIRECTV had an express obligation to provide a technical showing to demonstrate that operation of its satellite at an offset location would cause no greater interference than operation at an on-grid location.⁶ Instead, the *only* showing it made was to claim that no power reduction would be required at all because an act of nature that occurs less than 1% of the time—unsupported and irrationally high atmospheric losses—would purportedly reduce power at the earth’s surface to acceptable levels.⁷ Thus, DIRECTV’s “technical showings” regarding compliance with off-set power levels literally consisted of no showing at all.

DIRECTV asserts multiple defenses in an attempt to mask its noncompliance. None are compelling. First, DIRECTV mischaracterizes Spectrum Five’s Application for Review as merely “quibbl[ing] with a single parameter.”⁸ Spectrum Five has pointed out repeatedly that DIRECTV’s

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application to be improperly dismissed (*i.e.*, grant of DIRECTV’s application), all supported by substantial showings of fact and law as required by Section 1.115(b). The only precedent cited by DIRECTV – *Chapman S. Root Revocable Trust* – is irrelevant to the instant proceeding. There, the Commission rejected a four-paragraph long pleading that merely incorporated by reference arguments from an entirely different proceeding. By contrast, Spectrum Five directly seeks review of the dismissal of its application, which was *caused* by the Bureau’s improper decision to grant DIRECTV’s application and addressed in the same Bureau order. Moreover, failure to reinstate Spectrum Five’s application upon reversal of the Bureau’s Order would unlawfully subvert Spectrum Five’s rights as the next-in-queue applicant, and turn the Commission’s first-come, first-served policy on its head by *slowing* the introduction of new service to the public.

⁴ *International Bureau Establishes Deadline for Amendments to Pending 17/24 GHz BSS Applications*, Public Notice, DA 07-4895 (Dec. 5, 2007).

⁵ DIRECTV Application Opposition at 8, citing *EchoStar Satellite LLC*, 21 FCC Rcd 4060, ¶ 14 (Int’l Bur. 2006).

⁶ 47 C.F.R. § 25.140(b)(4)(ii).

⁷ *See* DIRECTV Conforming Amendment, File No. SAT-AMD-20080114-00014 at 12-13 (filed Jan. 14, 2008) (“DIRECTV Conforming Amendment”).

⁸ DIRECTV Application Opposition at 7.

application contained no technical analysis *at all*, other than DIRECTV's indefensible (and since repudiated) reliance on 1.1 dB of atmospheric attenuation. DIRECTV claims that it was sufficient merely to assert its satellite was "capable" of operating at reduced power. But the simple fact remains: DIRECTV made no technical showing of how or even whether it would reduce power because it claimed no power reduction was required at all. Incorrectly asserting that no analysis is required cannot rationally constitute the "adequate technical showings" mandated by the Commission.

Second, DIRECTV claims, without any citation, that the Bureau "has now resolved the issue" and provided "authoritative guidance for future applicants on the extent to which atmospheric effects may be included in 'clear sky' PFD calculations."⁹ No citation was given because no such "guidance" was provided. Rather, the Bureau merely assumed for its own calculations a worst-case value of 0.07 dB of attenuation for "extreme clear sky" conditions.¹⁰ But assuming this value, and using the power levels *proposed in DIRECTV's application*, DIRECTV would operate a satellite with a maximum PFD of -115.0 dBW/m²/MHz, which is the maximum permissible power for an *on-grid* satellite, but 0.5 dB *higher* than the maximum permitted by law for DIRECTV's proposed *off-grid* operations.

Third, DIRECTV repeats the Bureau's argument that the condition imposed by the Bureau to limit power levels will ensure compliance with the Commission's rules.¹¹ However, even as conditioned, DIRECTV's authority is premised on its flawed methodology to calculate PFD levels under Section 25.140(b)(4)(iii), which results in the authorization of excessive power levels in violation of the Commission's rules for off-set operations.¹² Relying improperly on atmospheric

⁹ *Id.* at ii.

¹⁰ *DIRECTV Enterprises, LLC, Application for 17/24 GHz BSS Satellite at 102.825° W.L.*, Order and Authorization, 24 FCC Rcd 9393 at ¶ 18 (2009) ("DIRECTV Authorization").

¹¹ DIRECTV Application Opposition at 13-17.

¹² Application for Review at 11-12.

attenuation, DIRECTV's application proposes to operate at -116.1 dBW/m²/MHz, which is purportedly 0.6 dB *lower* than the power level the Bureau claims it has imposed by condition. But because DIRECTV never proposed to reduce satellite's power output, and relies on 1.1 dB of atmospheric loss to claim a maximum PFD limit of -116.1 dBW/m²/MHz, the Bureau has actually authorized DIRECTV to generate a PFD of -115.0 dBW/m²/MHz, which is 0.5 dB *higher* than allowed under Section 25.140(b)(4)(iii) for the offset location. The condition's requirement that DIRECTV comply with the power limits under "clear sky conditions" does not remedy the error, since the Order fails to address DIRECTV's improper reliance on irrational levels of atmospheric losses to comply with the rules, which require DIRECTV to remain below specific power levels under *all* conditions, not just the very worst conditions.

Next, DIRECTV dismisses the claims of unlawful operation as "moot" because "DIRECTV has since modified its authorization to reduce maximum power levels by 5 dB."¹³ DIRECTV's decision to come into compliance with the FCC's rules three years after conforming amendment applications were required to be filed cannot remedy the fundamental flaw in DIRECTV's application. DIRECTV failed to comply with unambiguous processing rules by not supplying the Commission with a compliant and substantially complete application by the deadline for submitting conforming amendments. In accordance with the Commission's first-come, first-served licensing procedures, this lack of timely compliance required dismissal of the application.¹⁴ Indeed, the Bureau originally took this action in dismissing DIRECTV's application in 2009 for failure to show how it would comply with applicable power limits by the required deadline for filing conforming amendments.¹⁵ Dismissal was proper then, and remains the proper remedy now.

Finally, DIRECTV admits that "the Commission's PFD limits are designed to ensure that

¹³ DIRECTV Application Opposition at 13.

¹⁴ Application for Review at 12-14.

¹⁵ *See id.* at 5-6.

‘no satellite would operate with excessive, interference causing power’ and that the ‘defined limits are absolutely vital to the creation of a “level playing field” for all operators.’”¹⁶ But then DIRECTV mischaracterizes technical showings made by Spectrum Five and Pegasus in support of their own proposed 17/24 GHz satellites in an attempt to downplay the extent of DIRECTV’s noncompliance with those same power limits. DIRECTV asserts that Spectrum Five claimed atmospheric loss of “at least 0.35 dB” in its own application for a 17/24 GHz authorization.¹⁷ To the contrary, Spectrum Five’s application posited the potential for 0.35 dB of loss in its *link budget calculations*, which assume *maximum* atmospheric loss at the point of signal failure.¹⁸ DIRECTV was obligated to show that its signal would not be too strong when atmospheric losses were at a *minimum*. Thus, DIRECTV is again repeating its error of pointing to link budget values to substantiate compliance with power levels in “all conditions, including clear sky.” Also, DIRECTV describes the potential for interference caused by operating at 0.5 dB above applicable limits as “frivolous,” given that Spectrum Five and Pegasus proposed adjacent satellites with a nearly 3 dB PFD differential between them. The fact that Spectrum Five and Pegasus voluntarily proposed to operate with power levels *lower* than the rules allow, and Pegasus was far below the limit, cannot in any way excuse DIRECTV’s proposal to operate with power levels *higher* than the rules permit.

Respectfully submitted,

SPECTRUM FIVE LLC

By: /s/ David Wilson
President

Dated: July 27, 2012

¹⁶ DIRECTV Application Opposition at 15 (*citing* Spectrum Five Application for Review at 4).

¹⁷ *Id.* at 10-11.

¹⁸ See Spectrum Five LLC, Petition for Declaratory Ruling to Serve the U.S. Market from the 119.0° W.L. Orbital Location in the 17/24 Broadcasting Satellite Service Band, File No. SAT-LOI-20080910-00178, Technical Narrative at 15 (withdrawn Feb. 17, 2009).

CERTIFICATE OF SERVICE

I, Pam Conley, hereby certify that on this 27th day of July, 2012, a copy of the foregoing Consolidated Reply to Opposition to Application for Review is being sent via first class, U.S. Mail, postage paid, to the following::

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