

**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 Nos. 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	)	

**APPLICATION FOR REVIEW**

David Wilson  
President  
Spectrum Five LLC

July 2, 2012

## TABLE OF CONTENTS

	<b>Page</b>
I. BACKGROUND AND SUMMARY .....	2
II. THE BUREAU MISCHARACTERIZES DIRECTV'S CONFORMING AMENDMENT.....	7
III. DIRECTV HAS BEEN GRANTED AUTHORITY TO OPERATE A SATELLITE THAT FAILS TO COMPLY WITH THE COMMISSION'S TECHNICAL RULES .....	11
IV. THE BUREAU'S FAILURE TO MANDATE COMPLIANCE WITH EXPRESS TECHNICAL REQUIREMENTS VIOLATES THE COMMISSION'S FIRST- COME, FIRST-SERVED PROCEDURES .....	12
V. CONCLUSION.....	15

**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	)	

**APPLICATION FOR REVIEW**

Spectrum Five LLC (“Spectrum Five”), pursuant to Section 1.115 of the Commission’s Rules, 47 C.F.R. § 1.115, submits this Application for Review of the Order on Reconsideration issued by the International Bureau (“Bureau”) in the above-captioned proceeding.<sup>1</sup> Commission review of this action is necessary because the Bureau made erroneous conclusions as to material questions of fact in finding that DIRECTV Enterprises, LLC (“DIRECTV”) lowered its power levels to comply with the Commissions’ rules when in fact DIRECTV did not take a single action to reduce its power levels to protect adjacent satellites from interference. In addition, the Bureau’s attempt to remediate DIRECTV’s violation of the Commission’s technical rules

---

<sup>1</sup> *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”).*

through a “condition” was neither appropriate nor did it resolve the matter. These errors have resulted in the Bureau improperly authorizing DIRECTV to operate a satellite that exceeds the Commission’s defined power levels for 17/24 GHz Broadcasting Satellite Service (“BSS”) satellites operating from offset locations.<sup>2</sup>

Spectrum Five respectfully requests that the Commission overturn the Bureau’s Order on Reconsideration and direct the Bureau to grant Spectrum Five’s Petition for Reconsideration, reverse the order approving DIRECTV’s application, return DIRECTV’s application as unacceptable for filing, and reinstate Spectrum Five’s application.

## **I. BACKGROUND AND SUMMARY**

In May 2007, the Commission adopted service rules and first-come, first-served licensing procedures to authorize 17/24 GHz BSS satellites to operate at four degree intervals at precise orbital locations specified in Appendix F to the Report and Order.<sup>3</sup> 103.0° W.L. was one of the specified Appendix F orbital locations. Despite the adoption of the first-come, first-served process, the Commission treated then pending applications filed by DIRECTV, Pegasus, EchoStar, and Intelsat as simultaneously filed with priority over any later filed applications.<sup>4</sup>

A September 2007 Order on Reconsideration provided additional flexibility to 17/24 GHz BSS space station operators by allowing them to specify orbital locations other than those

---

<sup>2</sup> *DIRECTV Enterprises, LLC, Application for 17/24 GHz BSS Satellite at 102.825° W.L., Order and Authorization*, 24 FCC Rcd 9393 (2009) (“DIRECTV Authorization”).

<sup>3</sup> *The Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band*, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 8842 (2007) (“BSS Report and Order”).

<sup>4</sup> *Id.* at ¶¶ 140-143.

specified in Appendix F.<sup>5</sup> Pending applicants such as DIRECTV were given the advance opportunity to amend their applications to take advantage of this new flexibility.<sup>6</sup> Applicants could request authority to operate in locations offset from Appendix F orbital slots, but had to demonstrate that closer operations would not cause harmful interference to applicants for adjacent orbital locations by reducing their power according to the Commission's rules.<sup>7</sup> Because they would not know in advance the proposed orbital locations of other applications, these applicants were given 30 days to amend their applications, if made for non-grid locations, to make the required technical demonstration. The Commission explicitly directed the International Bureau to "dismiss as defective any amended applications that are not substantially complete."<sup>8</sup>

One of the major features of the 17/24 GHz BSS rules is to precisely limit harmful interference and thereby streamline the coordination process (none is necessary if operators

---

<sup>5</sup> See *The Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band*, Order on Reconsideration, 22 FCC Rcd 17951 (2007) ("BSS Reconsideration Order").

<sup>6</sup> *Id.* at ¶¶ 33-37.

<sup>7</sup> If a simultaneously filed amendment application requested full power and interference protection from an adjacent on-grid Appendix F location, the applicant for an offset location was required to submit a second amendment to demonstrate that operations would not cause harmful interference to applicants for adjacent on-grid orbital locations. *Id.* at ¶ 34 (requiring off-grid applicants either to "change the orbital location to the Appendix F orbital location from which it was offset or [to] remain at the offset location at reduced power and with reduced interference protection."). Although DIRECTV proposed to operate from an offset orbital location and claimed to operate at reduced power, it in fact proposed full power operation and did not submit a second amendment by the required cut-off date.

<sup>8</sup> *Id.* at ¶ 37.

follow the rules). To achieve that goal, the Commission imposed clear power flux density (“PFD”) limits to ensure that at all times, and under all conditions, no satellite would operate with excessive, interference-causing power. These defined limits are absolutely vital to the creation of a “level playing-field” for all operators.

To date, every applicant for a 17/24 GHz BSS authorization, except one—DIRECTV—has documented its compliance with the power limits without boosting satellite power and including spurious atmospheric effects to bring the power level at the earth’s surface into compliance with the limits. Rather, to show compliance with the power limits at all times and under *all conditions* as the rules require, all other applicants showed how the power limits would be met by controlling the output power of the satellite, not through rare intervention of the atmosphere.

In its application for a 17/24 GHz BSS authorization at 102.825° W.L., along with four other applications it filed at the same time for other orbital slots, DIRECTV proposed the maximum power permissible for on-grid satellites, but then relied exclusively on rare—and irrationally excessive—atmospheric effects to somehow bring the power levels of its offset satellites into conformity with the Commission’s power levels. DIRECTV did not propose to reduce the output power. Nor did DIRECTV provide any demonstration as to how, but for these alleged atmospheric effects, it could comply with the Commission’s limits. The effect of this approach—now improperly endorsed by the Bureau—is to give DIRECTV an unfair advantage over all other 17/24 GHz BSS applicants, none of whom have proposed to operate with the excessive power levels sought by DIRECTV, which in some cases sought up to 35% in “excess transmitted power” compared to its competitors.

DIRECTV submitted a “conforming” amendment to operate at the offset 102.825° W.L.

orbital location on January 14, 2008. In the amendment, DIRECTV acknowledged that its proposed offset operations would result in 0.5 dB less discrimination toward adjacent satellites. DIRECTV did not, however, propose to reduce the power generated by the satellite in order to comply with the express power limits set forth in the Commission’s rules. Rather, DIRECTV claimed that 1.1 dB of signal attenuation caused by atmospheric conditions would reduce the power levels on the earth’s surface to acceptable levels.<sup>9</sup> DIRECTV gave no basis or technical showing for its atmospheric adjustment factors in its amendment (only labeling it “atmospheric loss”). DIRECTV later disclosed in ex parte presentation materials that the atmospheric loss terms were taken directly from its link budget calculations—including cloud effects (later retracted by an ex parte presentation) and scintillation (not present 100% of the time)—which are intended to characterize these terms under high humidity and high temperatures when the link is at the onset of failure.<sup>10</sup> As Spectrum Five has repeatedly shown, DIRECTV relied on this flawed methodology, which results in DIRECTV proposing a satellite that will operate with substantially higher power than permitted by the Commission’s rules and cause harmful interference to adjacent satellites.

On January 6, 2009, the Bureau issued a declaratory ruling, finding that DIRECTV’s application was defective and should be dismissed.<sup>11</sup> The Declaratory Ruling properly

---

<sup>9</sup> See DIRECTV Conforming Amendment, File No. SAT-AMD-20080114-00014 at 12-13 (filed Jan. 14, 2008) (“DIRECTV Conforming Amendment”). Tellingly, no other applicant for a reverse band authorization has relied on atmospheric attenuation to demonstrate compliance with the Commission’s power limits.

<sup>10</sup> See Letter from William M. Wiltshire, Counsel for DIRECTV Enterprises, LLC, to Marlene H. Dortch, Secretary, FCC, File No. SAT-AMD-20080114-00014 (filed Dec. 8, 2008) (“DIRECTV Dec. 8 Ex Parte”).

<sup>11</sup> *DIRECTV Enterprises, LLC, Application for 17/24 GHz BSS Satellite at 102.825° W.L.*, Declaratory Ruling, 24 FCC 423 (2009) (“Declaratory Ruling”).

determined that DIRECTV's proposed service "would not comply with the Commission's rules for [17/24 GHz BSS] satellites."<sup>12</sup> But on February 9, 2009, the Bureau, on its own motion, set aside this declaratory ruling.<sup>13</sup> Despite clear demonstrations that DIRECTV's proposed power limits exceed levels permitted by the rules,<sup>14</sup> the Bureau granted DIRECTV's application on July 28, 2009.<sup>15</sup> The Bureau reaffirmed the grant of DIRECTV's application in the Order on Reconsideration.<sup>16</sup>

The Bureau erred in approving DIRECTV's application. Under the FCC's rules, maximum power limits must apply 100% of the time, under all conditions, not the worst case

---

<sup>12</sup> *Id.* at ¶ 1.

<sup>13</sup> *DIRECTV Enterprises, LLC, Application for 17/24 GHz BSS Satellite at 102.825° W.L.*, Order, 24 FCC Rcd 1343 (2009) ("DIRECTV Set Aside Order").

<sup>14</sup> *See, e.g.*, December 19, 2008 letter from Howard W. Waltzman, Counsel to Spectrum Five, LLC to Marlene Dortch, Secretary, Federal Communications Commission referencing IBFS files associated with Call Sign S2712 (DIRECTV's application) (letter requesting that the Commission dismiss the DIRECTV application at the nominal 103° W.L. orbital location) (December 19 Spectrum Five Letter); January 12, 2009 letter from Howard W. Waltzman, Counsel to Spectrum Five, LLC to Marlene Dortch, Secretary, Federal Communications Commission referencing IBFS files associated with Call Signs S2712 (DIRECTV's application) and S2778 and S2777 (Spectrum Five applications) (reporting Jan. 9, 2009 meeting of David Wilson and Tom Sharon of Spectrum Five, and Howard Waltzman, counsel to Spectrum Five, with International Bureau officials).

<sup>15</sup> DIRECTV Authorization, *supra* note 2.

<sup>16</sup> In July 2011, DIRECTV filed a modification application that no longer relies on atmospheric attenuation to meet the power level. *See In the Matter of DIRECTV Enterprises, LLC for Minor Modification of the DIRECTV RB-2 Satellite in the 17/24 GHz Broadcasting Satellite Service at 103° W.L.*, Application for Minor Modification, File Nos. SAT-MOD-20110727-00136, Call Sign: S2712 at 1 (filed Jul. 27, 2011) ("DIRECTV Modification Application"). As Spectrum Five demonstrated, the new power calculation used in DIRECTV's modification application unequivocally shows that DIRECTV's original application for a 17/24 GHz BSS satellite at the nominal 103° W.L. orbital location did not comply with the FCC's rules and should have been dismissed. *See* Spectrum Five, Supplement to Petition for Reconsideration, File Nos. SAT-LOA-20060908-00100, SAT-AMD-20080114-00014, and SAT-AMD-20080321-00077 (filed Dec. 27, 2011).



scenario when such extreme humidity and temperatures exist that it leads to link failure (which occurs only ~ 0.3% of the time), as DIRECTV assumes. By failing to address this material methodological error, the Bureau has effectively authorized DIRECTV to operate a full-power satellite at an offset location, in direct violation of the Commission's rules. DIRECTV did not show how it would reduce power to acceptable levels for its offset satellite, nor did the Bureau's ad-hoc condition address the fundamental error in DIRECTV's calculations or bring DIRECTV into compliance. DIRECTV's conforming amendment would imply that the atmosphere is always and in all places in the middle or on the verge of a full-scale thunderstorm, which common sense and experience show to be incorrect. Indeed, even during last weekend's extraordinary thunderstorm activity that knocked out power to over one million people in the Washington D.C. area, the estimated atmospheric losses reported by the event were estimated to be only 0.34 dB, based only on National Weather Service humidity and temperature records, substantially *less* attenuation than DIRECTV's conforming amendment assumes (this value is 1.1 dB) all the time.

Nothing in Bureau's Order on Reconsideration addresses DIRECTV's fundamental technical errors. Accordingly, reversal by the Commission is required.

## **II. THE BUREAU MISCHARACTERIZES DIRECTV'S CONFORMING AMENDMENT.**

DIRECTV had an obligation affirmatively to demonstrate compliance with all of the Commission's technical rules.<sup>17</sup> In particular, Section 25.208(w) required DIRECTV to show that PFD, "for all conditions, including clear sky," would not exceed -115.0 dBW/m<sup>2</sup>/MHz in the

---

<sup>17</sup> See 47 C.F.R. § 24.114(b).

Southeast United States (where the PFD maximum for DIRECTV's satellite occurs).<sup>18</sup> Section 25.140(b)(4)(iii) also required DIRECTV to demonstrate that its satellite operating on the “off-grid” location 102.825° W.L would not produce any greater interference than if the satellite were located at an “on-grid” location.<sup>19</sup> At the 102.825° W.L. location proposed by DIRECTV, the increase in interference caused by the offset operations would be 0.5 dB<sup>20</sup> and the PFD (via the satellite's EIRP) must be correspondingly reduced. Accordingly, DIRECTV's proposed satellite application at 102.825° W.L. should have been limited to a maximum PFD at the earth's surface of -115.5 dBW/m<sup>2</sup>/MHz. DIRECTV purported to comply with this express technical requirement by power reduction through an Act of God (atmospheric losses), not reduced transmit power.

The Bureau ruled that DIRECTV's conforming amendment “proposed to reduce its power to result in lower PFD” in order to comply with Section 25.140(b)(4)(iii).<sup>21</sup> This conclusion is factually incorrect. DIRECTV did not make the required technical showing and explicitly did not propose to reduce its power. Instead, DIRECTV exclusively relied on extreme atmospheric losses to reduce the power levels on the earth's surface.<sup>22</sup> As Spectrum Five has shown, those conditions (*i.e.*, simultaneous extreme high temperature and humidity) rarely—if

---

<sup>18</sup> 47 C.F.R. §25.208(w).

<sup>19</sup> *See* 47 C.F.R. § 25.140(b)(4)(iii).

<sup>20</sup> *See* DIRECTV Conforming Amendment at 13.

<sup>21</sup> Order on Reconsideration at ¶ 16.

<sup>22</sup> *See* DIRECTV Conforming Amendment at 12-13. The Bureau notes in its Grant that the minimum atmospheric loss for a completely dry atmosphere would be 0.07 dB, providing a PFD of -115.0 dBW/m<sup>2</sup>/MHz – still 0.5 dB above the limit required by Section 25.140(b)(4)(iii). Neither the Bureau nor DIRECTV identified or quantified how DIRECTV will bring the PFD below the applicable limit for an offset satellite.

ever—occur. When properly calculated, DIRECTV’s operations will not, in fact, produce a maximum PFD of -116.1 dBW/m<sup>2</sup>/MHz for the selected off-set location as stated in DIRECTV’s conforming application.<sup>23</sup>

DIRECTV’s PFD calculation is flawed because it improperly relies on excessive levels of atmospheric attenuation to reduce the PFD level under “all conditions” when the values utilized occur significantly less than 1% of the time. As Spectrum Five has previously explained, the Commission’s maximum PFD limits required DIRECTV to calculate the minimum possible atmospheric loss, not the worst to guarantee that, even when losses are at their lowest levels (low humidity and cold temperatures), the signal at the earth’s surface will not be too strong and create harmful interference to adjacent locations. Relying upon worst case scenario (storms) means when a storm is not present, DIRECTV’s power levels as proposed would exceed the strict power limits. DIRECTV used link budget values at the point of signal failure (when a customer loses his signal), which calculate maximum possible atmospheric loss to ensure that, even in the face of high losses, the signal will remain available to the consumer.<sup>24</sup> DIRECTV would have one believe that it is appropriate to use link budget loss values at the point of signal failure (*i.e.*, when high humidity and temperatures are present) to calculate PFD limits under *all* conditions. Link budgets, however, establish a *floor* for signal strength: they show that under conditions involving greatest losses (highest atmospheric attenuation), the signal will be strong enough for adequate reception at the earth’s surface. The maximum PFD limits in the Commission’s rules, by contrast, establish a *ceiling* on signal strength: these limits prohibit a

---

<sup>24</sup> DIRECTV even claimed that “clear sky” conditions could include “clouds.” *See* DIRECTV Dec. 8 Ex Parte at 2 (noting that “DIRECTV has concluded that one of the three additional factors used in its link budgets - clouds - would not be appropriate for use in a calculation based on “clear sky” conditions.”).

space station from generating a signal that would exceed acceptable PFD levels. By using power link budget values to calculate compliance with PFD limits, DIRECTV has obtained an authorization to operate a satellite that substantially exceeds the permissible levels set forth in the FCC's rules.<sup>25</sup>

The Bureau found that DIRECTV would have to reduce power by 0.5 dB from the limits set forth in Section 25.208(w) in order to comply with the offset limits in Section 25.140(b)(4)(iii). In ruling that DIRECTV demonstrated compliance with the reduced power limits, the Bureau cited an “interference analysis” in DIRECTV’s conforming amendment in which DIRECTV allegedly “proposed to reduce its power to result in lower PDF.”<sup>26</sup> However, the only “analysis” in the conforming amendment is the claim that losses due to atmospheric attenuation—under extreme weather conditions that exist at point of *signal failure*—reduce the PFD of the signal to the power levels required by Section 25.140(b)(4)(iii) under all conditions, including clear sky. In other words, DIRECTV took no action to reduce its power for being in an offset location and assumed that constant and extreme acts of God would take care of the situation. Contrary to the Bureau’s holding, DIRECTV did *not* propose to reduce the EIRP power output by the satellite. Rather, because of alleged atmospheric losses, DIRECTV claimed

---

<sup>25</sup> By relying on the values specified in its link budgets, DIRECTV effectively claims that “clear sky” conditions exist in the presence of 99 percent humidity and temperatures in excess of 90°F. As noted in the attached statement from Dr. William Gray, esteemed meteorologist and a pioneer in forecasting hurricanes and one of the world’s leading experts on tropical storms, however, such a claim is “grossly inaccurate,” because “observed weather conditions,” including “clouds and precipitation” would be present under such conditions. He also stated that the absence of clouds or rain under such circumstances had not ever been observed.

<sup>26</sup> Order on Reconsideration at ¶ 16 (*citing* DIRECTV Conforming Amendment at 12-13 and n.11).

that no reduction in power was even necessary.<sup>27</sup> The maximum PFD proposed by DIRECTV does not satisfy the reduced maximum of -115.5 dBW/m<sup>2</sup>/MHz for the offset operations under Section 25.140(b)(4)(iii). The conforming amendment contains no technical showing to demonstrate compliance with the offset power limits.

Thus, grant of DIRECTV's application is premised upon a mischaracterization of DIRECTV's conforming amendment and an erroneous finding of a material fact, which must be reversed by the Commission.

### **III. DIRECTV HAS BEEN GRANTED AUTHORITY TO OPERATE A SATELLITE THAT FAILS TO COMPLY WITH THE COMMISSION'S TECHNICAL RULES.**

The Bureau attempts to cure DIRECTV's failed technical demonstration by imposing a "condition" that purportedly limits DIRECTV's power to permissible levels.<sup>28</sup> Yet even as conditioned, DIRECTV's authority to operate 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.

The condition imposed by the Bureau provides that DIRECTV may operate its space station "up to the PFD levels reduced from those specified in Section 25.208(w) in accordance with the following calculation methodology" set forth in the condition.<sup>29</sup> To ensure compliance with applicable limits for its offset operations, the condition should have required DIRECTV to reduce power to at least -115.5 dBW/m<sup>2</sup>/MHz. However, because DIRECTV never proposed to reduce power in fact, but merely to rely on extreme atmospheric effects at the point of signal failure, the Bureau effectively endorsed DIRECTV's flawed methodology for complying with

---

<sup>27</sup> DIRECTV Conforming Amendment at 12-13 and n.11.

<sup>28</sup> See DIRECTV Authorization at ¶ 34.

<sup>29</sup> *Id.*

the limits. The result is that the “condition” to reduce power is no real condition at all.

Further, the “condition” permits DIRECTV to operate at “the lower of this calculated power or the power levels stated its application....”<sup>30</sup> Relying improperly on atmospheric attenuation, DIRECTV’s application proposes to operate at -116.1 dBW/m<sup>2</sup>/MHz, which on paper is 0.6 dB *lower* than the power level the Bureau claims it has imposed by the condition. But because DIRECTV never proposed to reduce the power output of the satellite, and includes the 1.1 dB atmospheric loss reduction in its claim of -116.1 dBW/m<sup>2</sup>/MHz maximum PFD, the Bureau has actually authorized DIRECTV to generate a PFD at -115.0 dBW/m<sup>2</sup>/MHz, at least 0.5 dB *higher* than allowed under Section 25.140(b)(4)(iii) at the offset location. In other words, the condition allows DIRECTV the right to operate at -115.0 dBW/m<sup>2</sup>/MHz because that is the power level it creates with its magical claim of atmospheric loss. Rather than specify a reduced power satellite, DIRECTV simply relied on an act of God that only occurs in the worst circumstances (~ 0.3% of the time when signal failure is occurring) to achieve compliance.

Because DIRECTV’s authorization, even as conditioned, is in violation of the Commission’s rules, it must be rescinded.

#### **IV. THE BUREAU’S FAILURE TO MANDATE COMPLIANCE WITH EXPRESS TECHNICAL REQUIREMENTS VIOLATES THE COMMISSION’S FIRST-COME, FIRST-SERVED PROCEDURES.**

The Commission adopted the first-come, first-served licensing process to allocate efficiently limited orbital resources.<sup>31</sup> To ensure the effectiveness of the process, it is incumbent upon the applicant to provide all information necessary to demonstrate compliance with the

---

<sup>30</sup> *Id.*

<sup>31</sup> *Amendment of the Commission’s Space Station Licensing Rules and Policies*, First Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 10760, 10793 (¶ 74) (2003) (explaining that these procedures were intended to allow the Commission “to act on satellite applications dramatically more quickly and efficiently. . .”).

Commission's rules at the time the application is filed.<sup>32</sup> Allowing first-come, first-served applicants to submit applications that fail to demonstrate compliance with all requirements undermines the policy. The benefits of the first-come, first-served process can only be achieved if the Bureau returns as unacceptable for filing any applications that do not comply with the Commission's rules, which it did in January 2009, before reinstating DIRECTV's application for unsupportable reasons.<sup>33</sup>

In the 17/24 GHz BSS context, the Bureau explicitly noted that “[e]ach Applicant must provide the appropriate technical showings to support its proposed operations.”<sup>34</sup> DIRECTV did not do this. Rather, DIRECTV provided an insufficient technical showing that failed to demonstrate compliance with PFD limits for 17/24 GHz BSS satellites. In fact, in the extensive record on this matter, DIRECTV never submitted that it had reduced satellite power to meet the required limits, but instead argued that its assumption of 1.1 dB of loss was appropriate. One can only assume that the reason DIRECTV made no such argument is because if it admitted that it had not reduced power, it would be dismissed as being defective having not taken advantage of the one month cure period. Even assuming, contrary to fact, that the “condition” effectively reduced PFD to permissible levels, the Bureau's attempt to remedy DIRECTV's failure to demonstrate compliance with the Commission's technical rules provides DIRECTV with an unfair procedural as well as substantive advantage in violation of the first-come, first served

---

<sup>32</sup> An application for a GSO-like satellite, including a 17/24 GHz BSS satellite, can only be granted if it complies “with all applicable rules, regulations, and policies.” 47 C.F.R. § 25.156(a); *see also* 47 C.F.R. § 25.158(b)(3)(i) (applications can only be granted if “the Commission finds that the applications meets the standards of § 25.156(a)”).

<sup>33</sup> 47 C.F.R. § 25.112(a)(2).

<sup>34</sup> *International Bureau Establishes Deadline for Amendments to Pending 17/24 GHz BSS Applications*, Public Notice, DA 07-4895 at 3 (Dec. 5, 2007).

licensing policy.<sup>35</sup> Moreover, failure to enforce these procedures in this case is particularly egregious because DIRECTV was already advantaged by the Commission's decision to shield DIRECTV from competing applications until it had the chance to submit amendments to conform to technical rules for offset operations.<sup>36</sup> In addition, because the Bureau allows DIRECTV to operate at higher than permissible power limits, it has an unfair competitive advantage at the expense of other operators.

Thus, failure to reverse the Bureau's order would undermine the Commission's established policies for first-come, first served licensing of 17/24 GHz BSS operations ultimately to the detriment of the public.

---

<sup>35</sup> The Bureau claims that imposition of the condition here is supported by its decision in *Intelsat North America LLC*, 24 FCC Rcd 7058 (Int'l Bur. 2009) ("*Inteslat*"). *Intelsat* is inapposite. In that case, the Bureau made minor adjustments to Intelsat's methodology to correct its PFD values by 0.01 dB (approximately 0.05%). In contrast, DIRECTV has proposed a system that would substantially exceed applicable limits by approximately 11% and cause objectionable interference to adjacent satellites. In addition, in *Intelsat* the Bureau imposed a condition to ensure that the operations proposed by Intelsat complied with the limits for offset operations. In contrast, here the Bureau attempted to *cure* defects in DIRECTV's system. Under first-come, first-served procedures, the duty to specify compliant operations was on DIRECTV.

<sup>36</sup> *See supra* note 6.



V. **CONCLUSION**

For the reasons provided herein, the Commission should overturn the Bureau's Order on Reconsideration and direct the Bureau to grant Spectrum Five's Petition for Reconsideration, reverse the order approving DIRECTV's application, return DIRECTV's application as unacceptable for filing, and reinstate Spectrum Five's application.

Respectfully submitted,

SPECTRUM FIVE LLC

By: */s/ David Wilson*

---

David Wilson  
President  
SPECTRUM FIVE LLC

Dated: July 2, 2012

**CERTIFICATE OF SERVICE**

I, Pam Conley, hereby certify that on this 2nd day of July, 2012, a copy of the foregoing Application for Review is being sent via first class, U.S. Mail, postage paid, to the following::

William M. Wiltshire  
Wiltshire & Grannis LLP  
1200 18th Street, N.W.  
Washington, D.C. 20036  
*Counsel for DIRECTV Enterprises LLC*

/s/ Pam Conley