Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of))
DIRECTV Enterprises, LLC	File Nos. SAT-LOA-20130205-00016
	SAT-AMD-20130716-00094
Application for Authority to Launch and Operate)
DIRECTV KU-45W, a Ku-band Space Station, at 45° W.L.	Call Sign S2893

PETITION TO DENY OR DEFER

EchoStar Satellite Operating Corporation ("EchoStar"), pursuant to Section 25.154(a) of the Commission's rules, ¹ submits this petition ("Petition")² requesting that the Commission either deny the above-captioned application ("Application"), as amended, of DIRECTV Enterprises, LLC (together with its affiliates, "DIRECTV"), or defer action on the Application until DIRECTV addresses certain deficiencies in its revised interference analysis.

In opposing EchoStar's pending application to launch operate the ECHO-45W FSS payload, DIRECTV claims that EchoStar's downlink interference calculations showing a noise temperature increase, or $\Delta T/T$, level of 73 percent (for a 65 cm receive antenna) would result in

¹ 47 C.F.R. § 25.154(a). EchoStar holds a Brazilian license to launch and operate a Ku-band satellite for Broadcasting Satellite Service, and has a pending application for an FCC license to launch and operate a Fixed Satellite Service ("FSS") payload ("ECHO-45W FSS") at 45.1° W.L. *See* EchoStar, Minor Amendment, IBFS File Nos. SAT-LOA-20120921-00152 & SAT-AMD-20130614-00085 (June 14, 2013).

² This Petition is filed in response to the Public Notice regarding DIRECTV's amendment proposing numerous revisions to its Application. *See Policy Branch Information: Satellite Space Applications Accepted for Filing*, Public Notice, Report No. SAT-01014, at 1 (May 9, 2014). Specifically, this Petition addresses deficiencies in DIRECTV's revised interference analysis.

significant degradation to DIRECTV's direct-to-home service to Brazil. DIRECTV's downlink interference calculations submitted in this proceeding, however, show an even higher $\Delta T/T$ level (for a 65 cm receive antenna) of 74 percent (before correcting a material error in DIRECTV's interference analysis, as further discussed below) to as much as 452 percent (after correcting DIRECTV's error). If the Commission accepts DIRECTV's baseless claim that a $\Delta T/T$ level of 73 percent is unacceptable for the proposed ECHO-45W FSS payload, then the Commission consistently should find that the higher $\Delta T/T$ level of 74 percent is unacceptable for the proposed DIRECTV KU-45W satellite and deny the Application on that basis.

Alternatively, the Commission should defer action on the Application until DIRECTV addresses certain deficiencies in its revised interference analysis. Specifically, DIRECTV incorrectly assumed that a 65 cm Ku-band receive antenna will comply with an off-axis antenna pattern of 29-25*log (theta) at a two-degree orbital separation, but such compliance is not physically possible. DIRECTV instead should have correctly assumed that a 65 cm Ku-band receiver antenna will meet the off-axis pattern such as ITU-R Recommendation BO.1213. With this correction, DIRECTV's downlink interference calculations would show a substantially higher ΔT/T level of 452 percent, not 74 percent.

Additionally, DIRECTV should be required to justify its use of downlink interference calculations resulting in a $\Delta T/T$ level higher than 73 percent, which it claims is unacceptable for

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³ See Letter from William M. Wiltshire, Counsel for DIRECTV Latin American Holdings, Inc., to Marlene H. Dortch, Secretary, FCC, IBFS File Nos. SAT-LOA-20120921-00152 & SAT-AMD-20130614-00085, at 4 (May 2, 2014).

⁴ See DIRECTV, Amendment Narrative, IBFS File Nos. SAT-LOA-20130205-00016 & SAT-AMD-20130716-00094, at 16 (July 16, 2013) ("Amendment Narrative"); see also Letter from Jennifer A. Manner, EchoStar, to Marlene H. Dortch, Secretary, FCC, IBFS File Nos. SAT-LOA-20120921-00152 & SAT-AMD-20130614-00085, Attachment (Technical Supplement), at 2 (May 23, 2014) (filed as corrected May 27, 2014).

EchoStar's proposed Ku-band FSS operations. In its revised interference analysis, DIRECTV states that the $\Delta T/T$ level for a 1.2 meter receive antenna is below the 6 percent level specified in the ITU Radio Regulations, but offers no justification for mandating the ITU's 6 percent level – which DIRECTV acknowledges is a "coordination trigger," not an ITU or FCC requirement – only for EchoStar's proposed FSS operations on Appendix 30B Ku-band frequencies, and not for DIRECTV's proposed FSS operations on unplanned Ku-band frequencies.⁵

Based upon the foregoing, the Commission should either deny DIRECTV's Application or defer action until DIRECTV addresses certain deficiencies in its revised interference analysis.

Respectfully submitted,

ECHOSTAR SATELLITE OPERATING **CORPORATION**

By: Jennifer A. Manner

Jennifer A. Manner Vice President of Regulatory Affairs 11717 Exploration Lane Germantown, MD 20876

June 9, 2014

⁵ See Amendment Narrative at 16.

AFFIDAVIT OF JAIME LONDONO

I declare under penalty of perjury the following:

- 1. I am employed by EchoStar Satellite Services LLC as Vice President, Advanced Programs & Spectrum Management, and have been an employee of the company since 2010.
- 2. I am familiar with Part 25 of the Commission's rules and the ITU Radio Regulations.
- 3. I have reviewed the foregoing Petition to Deny or Defer, and the factual statements therein are complete and accurate to the best of my knowledge and belief.

/s/ Jaime Londono
Jaime Londono

Date: June 9, 2014

CERTIFICATE OF SERVICE

I, Theresa Rollins, hereby certify under penalty of perjury that the foregoing Petition to Deny or Defer was served this 9th day of June, 2014, by depositing a true copy thereof with the United States Postal Service, first class postage pre-paid, addressed to:

William M. Wiltshire Wiltshire & Grannis LLP 1200 18th Street, NW Suite 1200 Washington, DC 20036 Karis A. Hastings SatCom Law LLC 1317 F St. NW, Suite 400 Washington, D.C. 20004

 $Counsel \ for \ SES \ Satellites \ (Gibraltar) \ Limited$

Counsel for DIRECTV Enterprises, LLC

/s	/ Theresa Rollins
	Theresa Rollins