

Stephanie A. Roy  
202 429 6278  
sroy@steptoe.com



1330 Connecticut Avenue, NW  
Washington, DC 20036-1795  
202 429 3000 main  
www.steptoe.com

18 October 2013

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

**Re: Call Sign S2740, IBFS File Nos. SAT-MOD-20100329-00058,  
SAT-AMD-20100610-00127**

Dear Ms. Dortch:

DISH Operating L.L.C. (“DISH”) files this letter to supplement information related to its request for a partial waiver of Sections 25.283(c) and 25.114(d)(14)(ii) of the Commission’s rules for the helium tanks on the EchoStar 7 satellite.<sup>1</sup> In DISH’s renewed request for a waiver, DISH noted that “[p]rior to end-of-life maneuvers, the helium will be used to repressurize the hydrazine tank. Once the pressure in the hydrazine tank is in equilibrium with the pressure in the helium tanks, no further helium can migrate from the helium tanks to the hydrazine tank, and the helium tanks will be isolated from the rest of the spacecraft via latch valve in accordance with the spacecraft manufacturer’s recommendation.”<sup>2</sup>

This repressurization is initiated by opening the latch valve between the helium and hydrazine tanks. The flow of helium from the helium tanks to the hydrazine tank is controlled by a pressure regulator. The flow of helium can be further controlled by closing the latch valve at

---

<sup>1</sup> 47 C.F.R. § 25.283(c) (requiring “all stored energy sources on board the satellite” to be “discharged, by venting excess propellant, discharging batteries, relieving pressure vessels, and other appropriate measures” at the satellite’s end-of-life); *id.* § 25.114(d)(14)(ii) (requiring satellite authorization applicants to demonstrate how stored energy will be removed at the spacecraft end-of-life).

<sup>2</sup> Letter from Stephanie A. Roy, Counsel for DISH Operating L.L.C., to Marlene H. Dortch, Secretary, FCC, IBFS File Nos. SAT-MOD-20100329-00058, SAT-AMD-20100610-00127 (Aug. 9, 2013).

any time during the pressurization process if the target hydrazine tank pressure is reached before equilibrium is achieved.<sup>3</sup>

Respectfully submitted,

\_\_\_\_\_  
/s/

Stephanie A. Roy  
Step toe & Johnson LLP  
1330 Connecticut Avenue, N.W.  
Washington, D.C. 20036  
(202) 429-3000  
*Counsel for DISH Operating L.L.C.*

cc: Stephen Duall  
Chip Fleming  
Kathryn Medley

---

<sup>3</sup> The helium mass aboard the spacecraft was measured to provide the anticipated pressurizations for the hydrazine tanks, and spacecraft operations estimates that the remaining helium is enough to perform the final repressurization up until the equilibrium point is reached.