Exhibit A Spire Global, Inc. Response to Question 43 FCC Form 312

Description of Application

Spire Global, Inc. ("Spire") hereby requests modification of its COGS earth station license.¹ Bulleted below are the minor modifications.

- Change the name of station from COGS to WBUGS.
- Change the address from 3060 Flying View, Ellicott, CO 80808 to 1825 33rd
 Street, Boulder, CO 80301.
- Change the UHF-1 antenna from the M2 Antenna Systems 401CP14 antenna to the Innov 405-18-R antenna. See *infra* Attachment 1 and Form 312 Schedule B.
- Change the SBAND-1 antenna (receive-only) from the ARA-Seavey C1502-800 antenna to the Elite 999001 antenna. See *infra* Attachment 1 and Form 312 Schedule B.

Consistent with the LEMUR Phase I Application, LEMUR Phase IB/IC Application, and

LEMUR Phase II Application, and to the extent necessary,² Spire requests waiver of the rules

and submits that good cause exists for grant of the requested waivers.³

¹ See License, Spire, SES-LIC-20160317-00246, Call Sign: E160033 (granted June 22, 2016).

² See Spire, SAT-LOA-20151123-00078, Exhibit A at 23-24 (filed Nov. 23, 2015); Spire, SAT-AMD-

^{20161114-00107,} Exhibit A at 12-23 (filed Nov. 14, 2016); Spire, SAT-AMD-20180102-00001, Exhibit A at 18-21 (filed Jan. 2, 2018).

³ See 47 C.F.R. § 1.3; see also WAIT Radio v. FCC, 418 F.2d 1153 (D.C. Cir. 1969), cert. denied 409 U.S. 1027 (1972); Northeast Cellular Tel. Co. v. FCC, 897 F.2d 1166 (D.C. Cir. 1990).

Exhibit A Spire Global, Inc. Response to Question 43 FCC Form 312

<u>Attachment 1</u> <u>Additional Antenna Information</u>

Due to the limitations of the Commission's Form 312 Schedule B form, Spire clarifies in

this attachment some of its responses in that form. Spire will use the following antennas:

• Yagi antenna for its transmissions and reception of downlink transmissions in the 402-

403 MHz band ("UHF-1" antenna); and

• Dual Circular Dish antenna for its reception of downlink transmissions in the 2020-2025

MHz band ("SBAND-1" antenna).

The characteristics of the antennas are provided below.

Table 1: UHF-1 Yagi Antenna Characteristics

Manufacturer & Model	Antenna Length (m)	3dB Beamwidth (deg)	Polarization
Innov	1.85 x 0.38 x 0.38	45.8	RHCP
405-18-R			

Table 2: SBAND-1 Dual Circular Dish Antenna Characteristics

Manufacturer & Model	Antenna Diameter (m)	3dB Beamwidth (deg)	Polarization
Elite	1.8	5.5	RHCP
999001			