EXHIBIT 1

APPLICATIONS FOR MODIFICATION
(Response to Question 43)

Pursuant to Section 25.117 of the Commission's rules,[1] EchoStar Broadcasting Corporation ("EchoStar") requests to modify licenses for three earth stations in Cheyenne, WY, Blackhawk, SD, and Gilbert, AZ (Call Signs E980005, E020248 & E070014) to add the EchoStar 23 satellite as a point of communications at the 44.9º W.L. orbital location for telemetry, tracking, and control ("TT&C") and feeder uplink communications only.[2]

EchoStar 23 is a planned satellite authorized under Brazilian authority for Ku-band Broadcasting-Satellite Service ("BSS") operations at the 44.9º W.L. orbital location by EchoStar 45, an EchoStar affiliate. The satellite will provide new, competitive direct-to-home ("DTH") television service to Brazil from its assigned orbital location.

EchoStar is seeking regular authority to operate the subject earth stations for TT&C and feeder uplink communications with the EchoStar 23 satellite, which will operate at its assigned orbital location of 44.9º W.L. in accordance with the following anticipated launch schedule:

(1) EchoStar 23 is scheduled for launch on approximately January 8-9, 2017.

(2) After launch and orbit-raising maneuvers, EchoStar 23 will be temporarily located at 86.4° W.L. for approximately 90 days.

(3) Following temporary operations at 86.4º W.L., EchoStar 23 will be moved to its assigned orbital location at 44.9° W.L., where in-orbit testing ("IOT") will commence for approximately 30 days.[3]

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[1] *See* 47 C.F.R. § 25.117.

[2] EchoStar currently has a pending application for modification of a fourth earth station (Call Sign E150098) to add EchoStar 23 as a point of communications for TT&C and feeder uplinks only. *See* EchoStar, Application for Modification, File No. SES-MFS-20160919-00792 (Sept. 19, 2016) ("E150098 Modification Application").

[3] EchoStar is authorized under STA to operate a fourth earth station (Call Sign E150098) for IOT and TT&C communications with EchoStar 23. *See* EchoStar, STA Stamp Grant, File No. SES-STA-20160427-00382 (Aug. 17, 2016). Further, concurrently with the instant modification applications,

For TT&C and feeder uplink communications with EchoStar 23, the subject earth stations – specifically, Call Signs E980005 (Antenna ID 1), E020248 (Antenna IDs BH8 and BH13), and E070014 (Antenna ID GFMA) – will operate on the following frequencies, consistent with the frequency bands and other technical parameters specified under their existing licenses:

- 17.300 – 17.310 GHz and 17.791 GHz for TT&C uplinks;
- 12.200 – 12.210 GHz for TT&C downlinks; and
- 17.300 – 17.800 GHz for feeder uplinks.

Because the proposed TT&C and feeder uplink communications with EchoStar 23 will remain consistent with the existing authorized technical parameters, such technical details are not included in the accompanying Schedule B.

The technical and orbital debris mitigation information required under Section 25.137(b) of the Commission's rules[4] is set forth in the Schedule S and Technical Annex submitted with the pending E150098 Modification Application,[5] and is incorporated herein by reference. EchoStar is not seeking authority to operate with EchoStar 23 for BSS/DTH service to the United States, and thus other requirements under Section 25.137 are inapplicable.

EchoStar is seeking additional STAs to operate the subject earth stations for IOT and TT&C communications with EchoStar 23.

[4] *See* 47 C.F.R. § 25.137(b).

[5] *See* E150098 Modification Application, File No. SES-MFS-20160919-00792, Schedule S & Technical Annex.

EXHIBIT 2

OTHER LICENSES AND APPLICATIONS
(Response to Question 36)

On July 26, 2011, the FCC declared null and void an authorization of EchoStar Corporation, the parent company of EchoStar Satellite Operating Corporation (together with their affiliates, "EchoStar"), to construct, launch, and operate a new Direct Broadcast Satellite at 86.5º W.L. for failure to meet the critical design review milestone, and rejected EchoStar's request to modify its 86.5º W.L. authorization to allow the in-orbit EchoStar 8 satellite to provide service from that orbital location.[6]

The FCC also has denied a few of EchoStar's applications for initial license or modification.[7]

The FCC has dismissed, but not denied on the merits, a few of EchoStar's license applications without prejudice to refiling.[8]

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[6] *See EchoStar Corporation*, Memorandum Opinion and Order, 26 FCC Rcd 10,442 (IB 2011).

[7] *See Satellite Communications Services Information Re: Actions Taken*, Public Notice, Rpt. No. SES-00847, at 27 (IB rel. Aug. 16, 2006) (denying HNS License Sub, LLC's, request for extension of construction milestones regarding File Nos. SES-MOD-20060404-00560 and SES-MOD-20060404-00561); *EchoStar Satellite LLC*, Memorandum Opinion and Order, 19 FCC Rcd 7846 (IB 2004) (denying applications to launch and operate four geostationary satellites because of interference concerns); *EchoStar Satellite LLC*, Order, 20 FCC Rcd 12027 (IB 2005); *EchoStar Satellite Corporation*, Memorandum Opinion and Order, 17 FCC Rcd 8831 (IB 2002) (denying request to extend construction milestone dates); *EchoStar Satellite Corporation*, Memorandum Opinion and Order, 16 FCC Rcd 14300 (IB 2001).

[8] *See, e.g.*, Letter from Robert G. Nelson, Chief, Satellite Division, to Pantelis Michalopoulos, Counsel for EchoStar Corporation, 24 FCC Rcd 7132 (IB 2009); *EchoStar Corporation, Application to Operate a C-Band Geostationary Satellite Orbit Satellite in the Fixed-Satellite Service at the 84.9º W.L. Orbital Location*, Memorandum Opinion and Order, 25 FCC Rcd 10193 (IB 2010); Letter from Paul E. Blais, Chief, Systems Analysis Branch, Satellite Division, to Alison Minea, Corporate Counsel, EchoStar Broadcasting Corporation, 28 FCC Rcd 10214 (IB 2013); Letter from Paul E. Blais, Chief, Systems Analysis Branch, Satellite Division, to Alison Minea, Corporate Counsel, EchoStar Broadcasting Corporation, 28 FCC Rcd 10216 (IB 2013).