Kathleen A. Kirby
202.719.3360
kkirby@wiley.law

Wiley Rein LLP
2050 M Street NW
Washington, DC 20036
Tel: 202.719.7000

wiley.law

December 12, 2022

VIA e-mail: audiofilings@fcc.gov

Marlene H. Dortch, Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

Re: Estrella Radio License of Houston LLC FRN: 0016264632
KEYH(AM), Houston, TX (Facility ID 2911)
Request for Extension of Special Temporary Authority ("STA")

Dear Ms. Dortch:

On behalf of Estrella Radio License of Houston LLC ("ERL"), licensee of KEYH(AM), Houston, TX, facility ID 2911, this is to request a further extension of the special temporary authority, BSTA-20211207AAF, granted on December 15, 2021, to continue operating from an alternate site location with a temporary long-wire antenna. See attached Engineering Statement for additional information.

The licensee has authorized undersigned counsel to certify on its behalf that the licensee is not subject to denial of Federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862.

If you have any questions regarding the foregoing, please contact the undersigned.

Sincerely,

Kathleen A. Kirby

Attachment

ENGINEERING STATEMENT IN SUPPORT OF KEYH(AM)

SHUNT FEED STA OPERATION

850 kHz 0.1 kW ND-U

December 6, 2022

Estrella Radio License of Houston LLC (ERLH) is currently authorized to operate with STA facilities as specified in an FCC letter authorization dated June 16, 2022. The current antenna system is a 73.5 meter wire attached to a 75.9 meter self-supporting tower structure carrying FCC Tower registration number 1323158. Affiant has coordinated with ERLH's consultant, Joseph Donalson, for purposes of determining if a feed system can be implemented that will meet FCC 73.21(a)(2) minimum radiation efficiency of 107.5 mV/m at 1 kilometer. Initial design work using an internal feed has proven to be impractical but a shunt feed does appear to meet FCC efficiency requirements.

ERLH requests that the STA renewal be issued with a shunt feed design to allow the shunt feed to be implemented and adjusted to determine the best feed point impedance. Tower structural work is planned prior to installation of a LPTV antenna for KZHO-LD. When this work is completed, and the shunt feed implemented, ERLH should be able to apply for a construction permit for Class D facilities. The proposed facility technical requirements are as follows:

The coordinates of the tower are:

NAD 83	N 29 49 33.0	W 95 22 36.0
NAD 27	N 29 49 32.0	W 95 22 35.0

FCC Registration: #1323158

Antenna Type: Grounded, self-supporting tower height 75.9 meters overall height
The 4 sided structure will be fed with ¼" galvanized steel guy wire or similar 25' north of the NE tower leg. The shunt feed point will be approximately 10' above ground to avoid any RF hazard to a person on the ground. The proposed facility meets OET-65, Section 1, Table 1 and 2 with a power level of 0.1 kW.

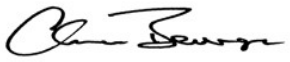
NEC 4.2 Analysis: Starting shunt wire attachment height of 100'. To be field adjusted.

Perfect earth gain at 25 degrees azimuth 5.51 dBi

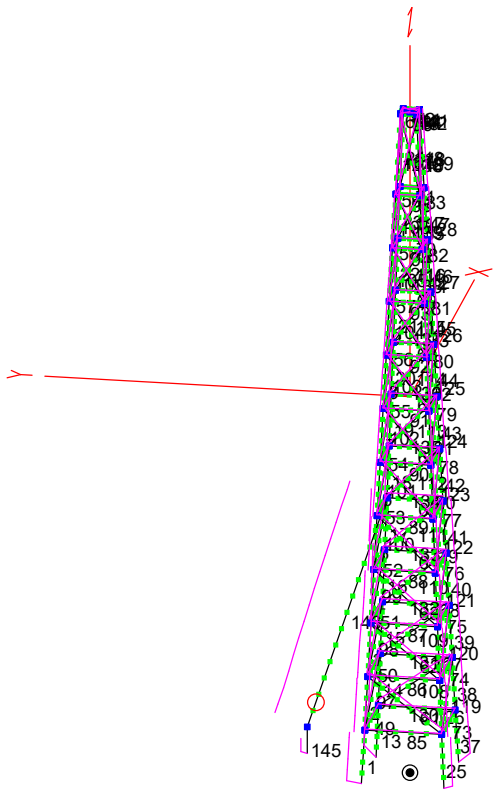
Radiation pattern front to back ratio 1.07 dB

Effective field at 1 kM for 1 kW = 307 mV/m

The foregoing was prepared on behalf of Estrella Radio License of Houston, LLC by Clarence M. Beverage of Communications Technologies, Inc., Medford, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The undersigned certifies, under penalty of perjury, that the statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.



Clarence M. Beverage
for Communications Technologies, Inc.
Medford, New Jersey
December 6, 2022

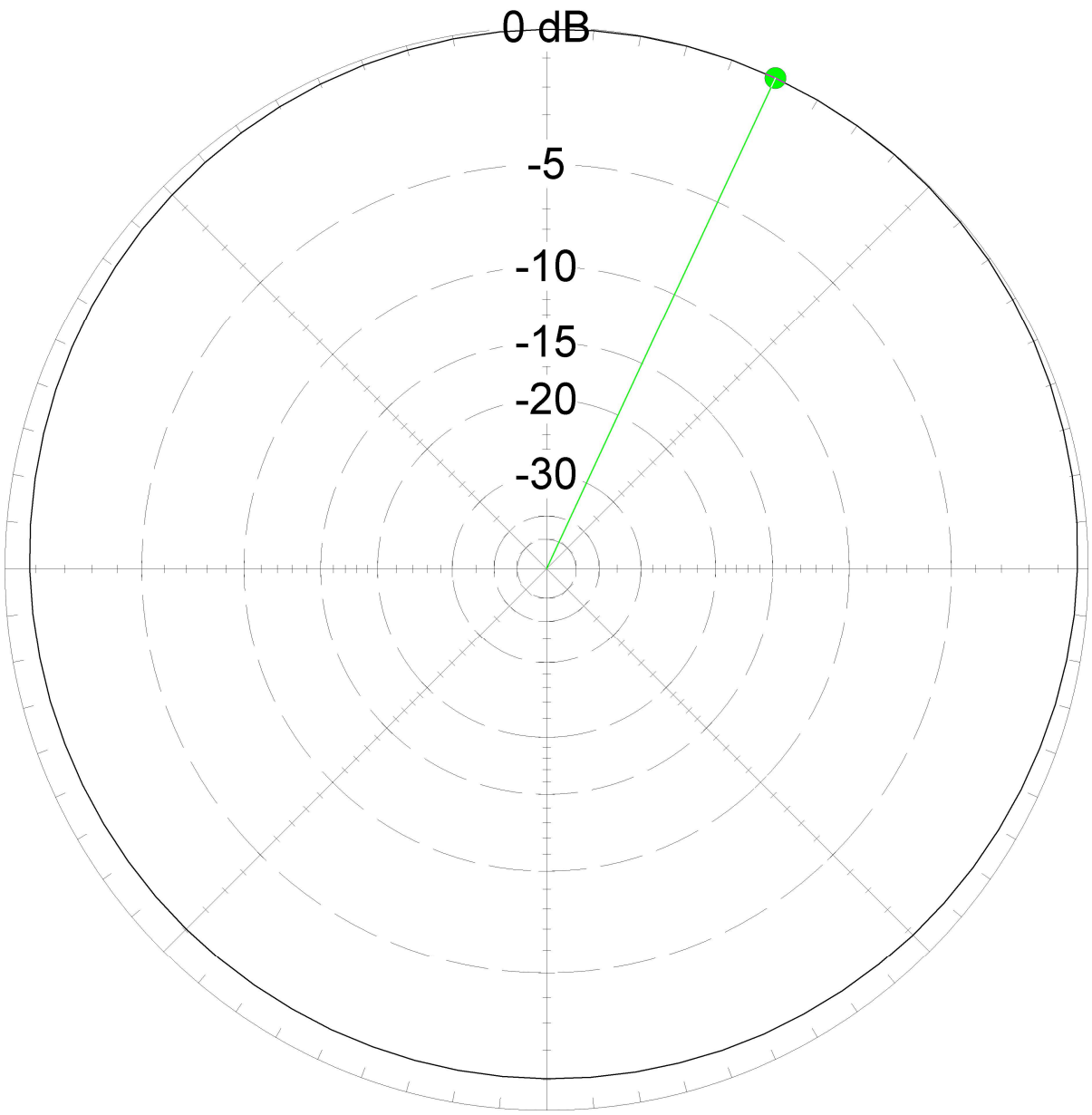


KEYH Houston

FIGURE 1

Total Field

EZNEC Pro/4



KEYH Houston 0.85 MHz

Azimuth Plot		Cursor Bear	25.0 deg.
Observation Ht	5 ft	Gain	5.51 dBi
Outer Ring	5.51 dBi		0.0 dBmax

Slice Max Gain	5.51 dBi @ Bearing = 25.0 deg.
Front/Back	1.07 dB
Beamwidth	?
Sidelobe Gain	< -100 dBi
Front/Sidelobe	> 100 dB

FIGURE 2