

KEHD (FM)
Channel 252 C1 – 98.3 mHz
100 KW ERP – 843.4 M AMSL
Big Lake, TX
May 2022

73.315 Compliance Using 73.313(e)

From the proposed site of North Latitude 31 16 08.8 and West Longitude 101 06 46.2, the 70 dBu contour does not cover 100% of Big Lake, TX, the city of license. However, in this particular case, we find that a supplemental method of depicting city grade coverage as noted in Section 73.313(e) of the Commission's rules would be appropriate. The community of Big Lake is completely inside the 60 dBu contour.

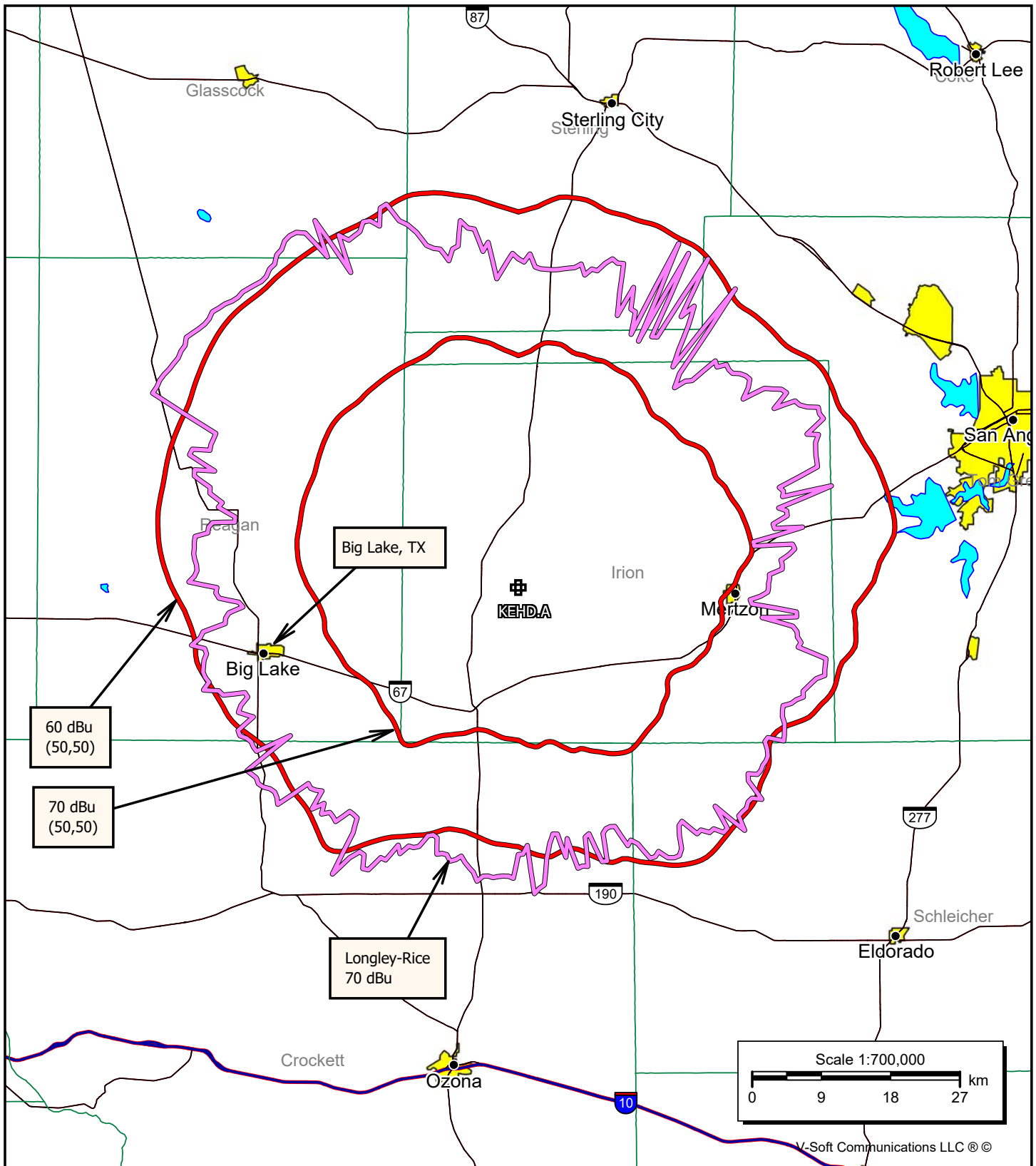
Big Lake, TX is within an arc between 253 and 258 degrees from the proposed transmitter. Utilizing the Commission's 50/50 curves, these radials fall short of covering 100 percent of the city of license. We alternatively have determined the location of the 70 dBu contour using the Longley-Rice prediction method. This methodology, purchased from V-Soft Communications, in a program called "Probe 5" was used to produce this study. In this particular situation, coverage calculations for the 70 dBu contour have been made in a point-to-point mode (mean occurrence drop-off). The following table is a comparison of the standard FCC method of calculating the 70 dBu and the Longley-Rice method. In all cases, the Longley-Rice method exceeds the FCC method greater than 10%.

Radial (Bearing)	Location of 70 dBu FCC Method In KM	Location of 70 dBu Longley-Rice Method in KM	Gain KM	Percent Change
253	25.23	42.00	16.77	66.46
254	25.37	42.30	16.93	66.73
255	25.52	42.40	16.88	66.14
256	25.65	42.15	16.50	64.32
257	25.73	41.90	16.17	62.84
258	25.72	41.40	15.68	60.96

Also in this exhibit is a graphic depiction of the proposed normally calculated 60 and 70 dBu contours, the Longley-Rice 70 dBu contour, the proposed transmitter site and Big Lake, TX, the city of license.

Based on this supplemental depiction, we find that the City of Big Lake, TX is served by the city grade contour in compliance with Section 73.315 of the Commission's rules.

Bromo Communications, Inc.



KEHD (FM) Community Coverage
252 C1 - 100 KW - 843.4 M AMSL
Big Lake, TX

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