

## EXHIBIT 16 COMMUNITY OF LICENSE COVERAGE OF CLIFTON, ILLINOIS PROPOSED

Normally with proposed NCE facilities demonstration of 60 dBu coverage suffices, as the community of license, Clifton, Il, *is contained* within the proposed 60 dBu FCC F(50,50) contour. The proposed facility is utilizing a commercial band channel reserved for NCE use. In these cases, the community of license must be covered by a 70 dBu city-grade contour. Since the FCC F(50,50) 70 dBu contour for the proposed minor modification does not cover Clifton, Il, the FCC rules and processing policy allow an alternative showing to establish community of license coverage in specific cases where exceedingly flat or rough terrain is present.<sup>1</sup> Such a showing must demonstrate the terrain departs widely from a 50-meter roughness value,<sup>2</sup> and the distance to the coverage contour must exceed that of the FCC F(50,50) method by more than 10% to be considered.

Figure 1 shows the boundary of Clifton, Il in relation to the 70 dBu coverage area produced using Longley-Rice (ITS ITM) propagation model.<sup>3</sup> Figure 2 shows the FCC F(50,50) 70 dBu contour in relation to the Longley-Rice =>70 dBu area (shaded red), and 70 dBu contour edge. Figure 3 shows Clifton, Il, extending along the arc of 92°T to 100°T from the transmitter location. Figure 4 shows the requisite calculations derived via *V-Soft Probe 4* software.

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<sup>1</sup> See *Letter to KMAJ-FM Topeka, Kansas from FCC*, August 8, 2002. Letter outlined the specific guidelines required to propose using 70 dBu Longley-Rice coverage instead of FCC F(50,50) 70 dBu coverage.

<sup>2</sup> Terrain roughness ( $\Delta h$ ), derived by the FCC in 1975, where the 50-meter value represents an average value for terrain in the US. See 56 FCC 2d 749 (1975).

<sup>3</sup> Propagation plotted via professional broadcast software *V-Soft Communications Probe 4* (Climate: Continental temperate, Conductivity 0.005, Dielec Const 15, Refractivity 311, Receiver Ht AG 9.1m, Receiver Gain 0 db, Time Variability 50%, Sit. Variability 50%, ITM Mode: Broadcast).

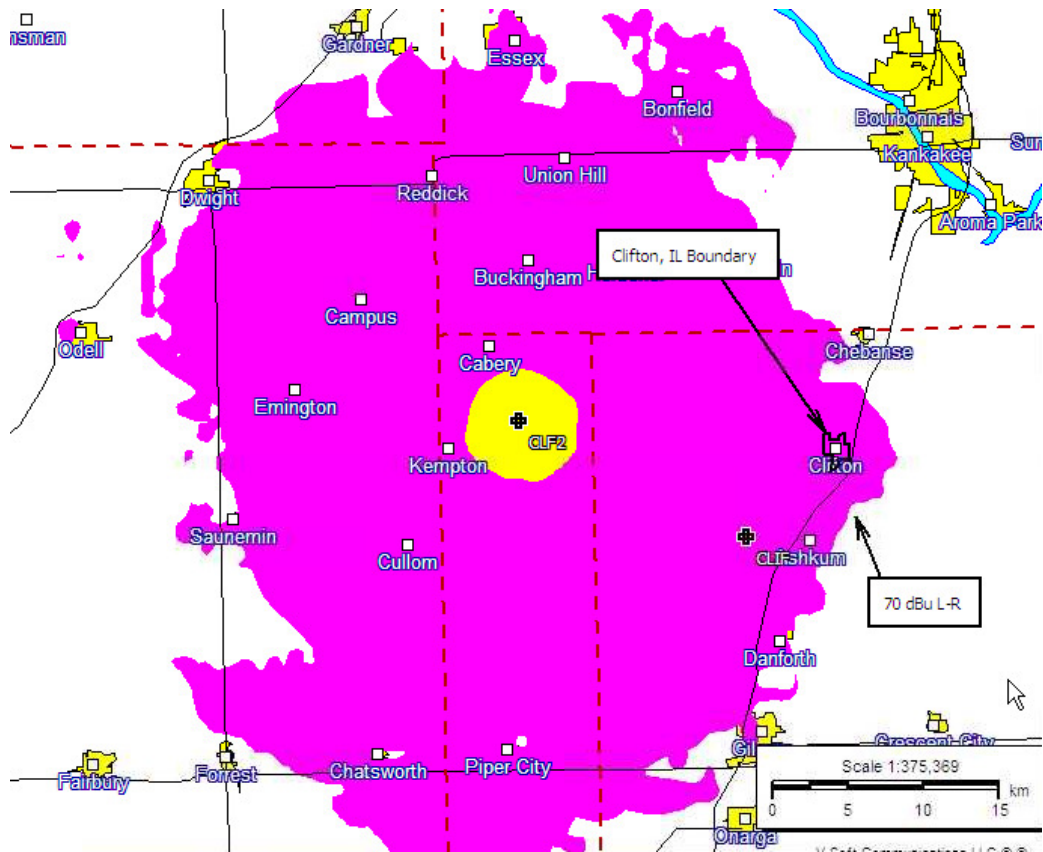


Figure 1: Longley-Rice 70 dBu coverage.

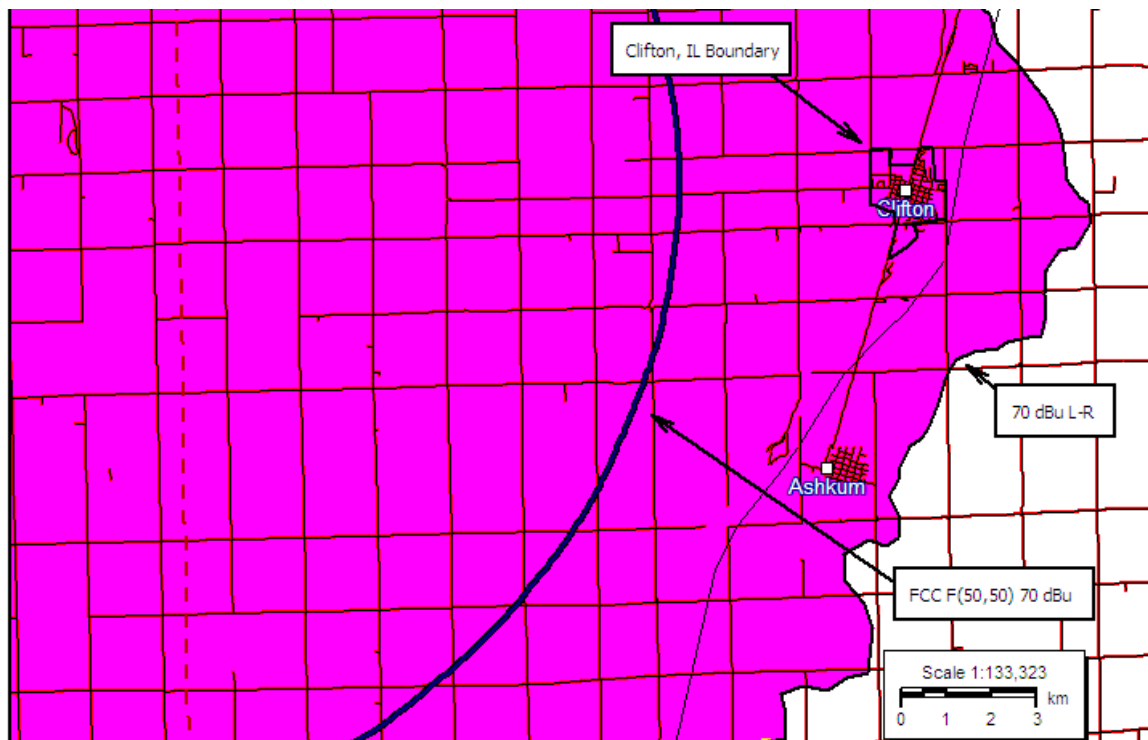


Figure 2: FCC F(50,50) 70 dBu and Longley-Rice 70 dBu.

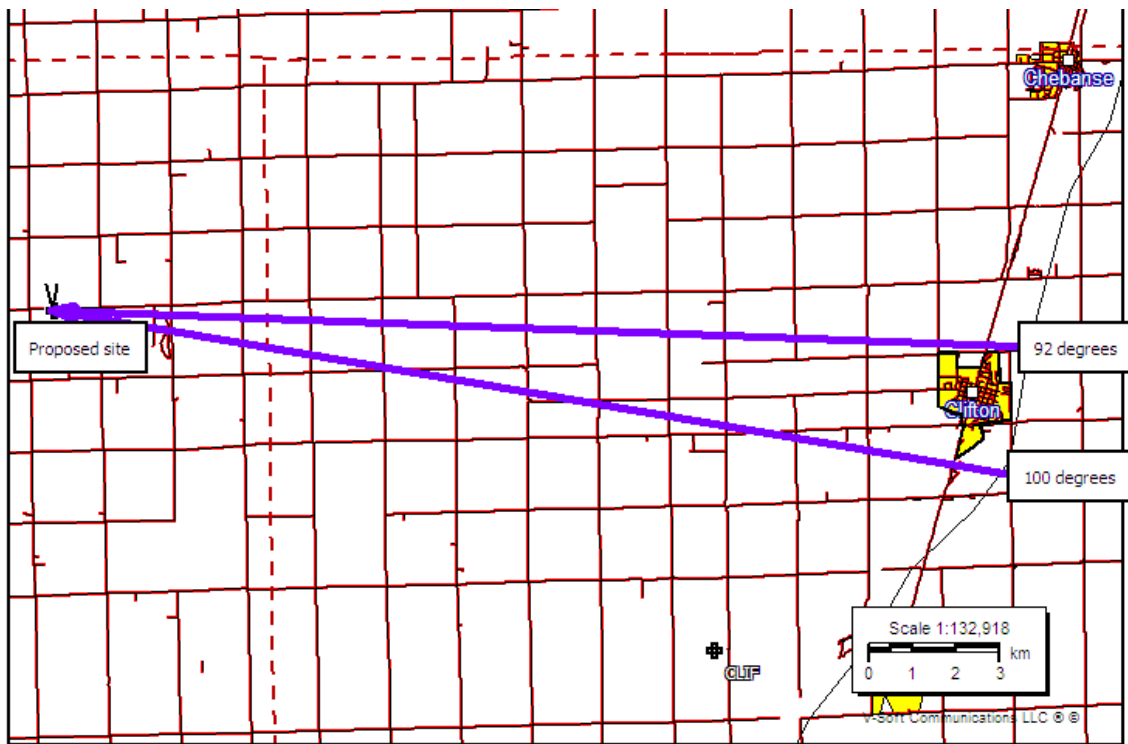


Figure 3: Clifton coverage arc.

**Tabulation of Terrain Roughness, Distance to FCC F(50,50) 70 dBu Contour, and Distance to Longley-Rice 70 dBu Contour**

Azimuth	Terrain Roughness $\Delta h$ (m)	FCC F(50,50) 70 dBu (km)	Longley Rice ITS ITM (km)	Percent Increase
92	14.7	15.8	24.2	153%
93	13.5	15.8	24.3	154%
94	12.7	15.9	24.5	154%
95	12.3	15.9	24.8	156%
96	12	15.9	24.9	157%
97	12.2	15.9	24.6	155%
98	12.4	16	24.2	151%
99	12.7	16	24.1	151%
100	16	16	24.2	151%

Figure 4

Parameters:

- Delta h calculated in accordance with Section 73.313(h) with 10 points/km.
- FCC Contour distances calculated in accordance with Section 73.313(c) and (d) using V-Soft 30 Second US terrain database.
- Distance to Longley-Rice 70 dBu contour was calculated electronically via V-Soft Probe 4 Signal Table tool, between start bearing 92 and stop bearing 100, with distance interval set to 0.1 kilometers. dBu values were thus viewed within the table, with the 70 dBu values cross-referenced with distance value from the transmitter.
- Percentage increase calculated by standard equation, with final value compared with 110% (value must be greater than 110%).
- Proposed main studio location proposed to comply with Section 73.515 either within 25 miles of the community of license, or via NCE main studio waiver, as allowed since permittee currently has another NCE main studio licensed and in operation (WEFT, 113 N. Market St. Champaign, IL. 61820).

Conclusion: For all radials calculated terrain roughness falls below the FCC 20-meter threshold, characterized by *exceedingly flat terrain*. All distances measure to the Longley-Rice exceed those of the FCC F(50,50) 70 dBu by much more than the required 10% of the FCC F(50,50) method distance. The proposed appears to comply with the qualifications for an alternative showing to establish adequate community of license coverage.