

NEW Station Section 73.315 Supplemental Showing Longley-Rice City Grade Coverage of Pearsall, TX

This Supplemental Showing is based upon the standards established in the FCC DA-10-1760, The Skytower Communications decision. A supplemental showing using the proposed facility's Longley-Rice coverage is used to show city coverage of Pearsall, TX. There are no major terrain obstructions between the transmit antenna and Pearsall. However, in an abundance of caution, an additional showing included in this report assumes 4 dB of Urban Clutter. All maps were created using V-Soft Probe Professional Version 4.62. The specific Longley-Rice software settings are listed on each of the coverage maps.

Exhibit A is a map that demonstrates that 100% of Pearsall is contained in the FCC F(50,50) 60 dBu contour.

Exhibit B is a table showing the distances to the FCC 70 dBu contour and Longley-Rice mean occurrence 70 dBu contour for the 18 radials (100 to 118 degrees azimuth) that cross over Pearsall is also included. The supplemental showing clearly establishes that the Longley-Rice contours along the radials that cross the corporate boundaries of Pearsall are more than 10 percent greater than the FCC F(50,50) 70 dBu contours.

Exhibit C is a map demonstrating that calculated Longley-Rice signal extends well beyond the 10% threshold for a supplemental showing. The supplemental showing clearly establishes that the Longley-Rice signal along the radials that cross the corporate boundaries of Pearsall are more than 10 percent greater than the FCC F(50,50) 70 dBu contours.

Exhibit D is a Longley-Rice signal shading map showing the 70 dBu signal coverage of Pearsall. 100 percent of the people in Pearsall would receive a Longley- Rice signal of 70 dBu or greater.

Exhibit E is a Longley-Rice signal shading map showing the 74 dBu signal coverage of Pearsall. This map assumes 4 dBu of Urban Clutter. 100 percent of the people in Pearsall would receive a Longley- Rice signal of 74 dBu or greater.

Therefore, it is believed that the proposed long-form application is in compliance with the Section 73.315 community coverage rules.

Ovalde

Medina

EXHIBIT A

NEW - Channel 277A - Pearsall, TX
Supplemental Showing - Section 73.315
FCC F(50,50) 60 dBu Contour

Pearsall App
RM11690
Latitude: 28-56-34 N
Longitude: 099-16-47 W
ERP: 6.00 kW
Channel: 277
Frequency: 103.3 MHz
AMSL Height: 289.0 m
Elevation: 204.2 m
Horiz. Pattern: Directional
Vert. Pattern: No

FCC F(50,50)
60 dBu Contour



Pearsall App

Pearsall, TX



Frio

Zavala

Scale 1:410,645

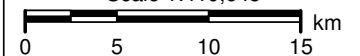


EXHIBIT B

Contour Distance Comparison

70 dBu F(50,50) Contour			Longley-Rice Mean Occurrence	
Azimuth (deg)	Distance (km)	HAAT (m)	Distance (km) ²	% Increase
100	17.82	118.9	25.7	44.2%
101	17.86	119.4	25.8	44.5%
102	17.9	119.9	25.8	44.1%
103	17.92	120.2	29.05	62.1%
104	17.93	120.3	26	45.0%
105	17.94	120.4	26.1	45.5%
106	17.94	120.4	27.3	52.2%
107	17.95	120.6	25.9	44.3%
108	17.96	120.6	25.1	39.8%
109	17.96	120.7	26.6	48.1%
110	17.96	120.7	27.6	53.7%
111	17.96	120.7	29.05	61.7%
112	17.95	120.6	26.2	46.0%
113	17.94	120.5	28.55	59.1%
114	17.95	120.5	28.55	59.1%
115	17.96	120.8	28.1	56.5%
116	17.99	121.2	28.1	56.2%
117	18.02	121.6	27.8	54.3%
118	18.04	121.8	27.85	54.4%
			Average	53.9%

Ovalde

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EXHIBIT C

NEW - Channel 277A - Pearsall, TX
Supplemental Showing - Section 73.315
Longley-Rice 70 dBu - Mean Occurrence Contour

Longley-Rice 70 dBu
Mean Occurrence Contour

FCC F(50,50)
70 dBu

Pearsall App

Pearsall, TX

Pearsall App

RM11690

Latitude: 28-56-34 N

Longitude: 099-16-47 W

ERP: 6.00 kW

Channel: 277

Frequency: 103.3 MHz

AMSLL Height: 289.0 m

Elevation: 204.2 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model: Longley-Rice

Climate: Cont temperate

Conductivity: 0.0050

Dielec Const: 15.0

Refractivity: 311.0

Receiver Ht AG: 9.1 m

Receiver Gain: 0 dB

Time Variability: 50.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

Terrain: NED 3 Second US Terrain

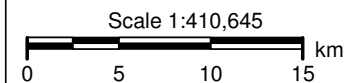
Cell Size: 0.1

Profile Increment: 0.1

100.0°

118.0°

Zavala



Longley-Rice Signal Strength

■ > 70.0 dBu

EXHIBIT D

NEW - Channel 277A - Pearsall, TX
Supplemental Showing - Section 73.315
Longley-Rice 70 dBu Signal Strength
(100 percent of the Pearsall population receive
a 70 dBu or greater Longley-Rice signal)

Pearsall App

RM11690

Latitude: 28-56-34 N

Longitude: 099-16-47 W

ERP: 6.00 kW

Channel: 277

Frequency: 103.3 MHz

AMSL Height: 289.0 m

Elevation: 207.0 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: Longley-Rice

Climate: Cont temperate

Conductivity: 0.0050

Dielec Const: 15.0

Refractivity: 311.0

Receiver Ht AG: 9.1 m

Receiver Gain: 0 dB

Time Variability: 50.0%

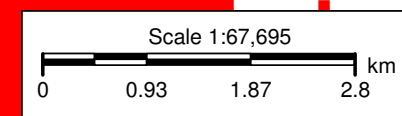
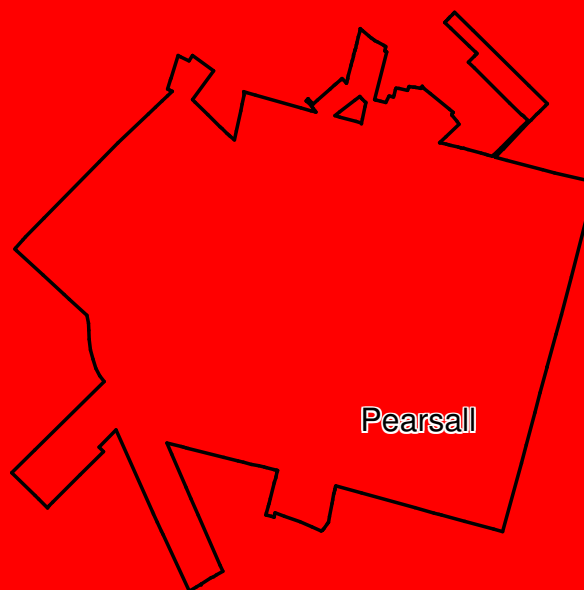
Sit. Variability: 50.0%

ITM Mode: Broadcast

Terrain: NED 3 Second US Terrain

Cell Size: 0.1

Profile Increment: 0.1



Longley-Rice Signal Strength


 > 74.0 dBu

EXHIBIT E

NEW - Channel 277A - Pearsall, TX
Supplemental Showing - Section 73.315
Longley-Rice 74 dBu Signal Strength
(70 dBu with 4 dB Urban Clutter Loss)
(100 percent of the Pearsall population receive
a 74 dBu or greater Longley-Rice signal)

Pearsall App

RM11690

Latitude: 28-56-34 N

Longitude: 099-16-47 W

ERP: 6.00 kW

Channel: 277

Frequency: 103.3 MHz

AMSL Height: 289.0 m

Elevation: 207.0 m

Horiz. Pattern: Omni

Vert. Pattern: No

Prop Model: Longley-Rice

Climate: Cont temperate

Conductivity: 0.0050

Dielec Const: 15.0

Refractivity: 311.0

Receiver Ht AG: 9.1 m

Receiver Gain: 0 dB

Time Variability: 50.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

Terrain: NED 3 Second US Terrain

Cell Size: 0.1

Profile Increment: 0.1

