

Community License Coverage

Introduction

Educational Media Foundation (“EMF”) desires to show coverage of its community of license Hotchkiss, CO. Since standard model does not show adequate coverage of the community of license, then a supplemental showing is used.

Discussion

Using the standard FCC model, the predicted 70 dBu F(50/50) contour does not cover the community of license as required by 47 C.F.R. Section 73.315(a). However, with the use of an alternate propagation method (in this case Longley Rice) required community of license coverage can be shown.

The following parameters were used in determining the Longley/Rice 70 dBu coverage for the community of license:

Conductivity:	0.015
Dielectric Constant:	15
Refractivity:	311
Climate Zone:	Continental Temperate
Receiver Height:	9 m AGL
Receiver Gain:	0
Time Variability:	50
Situation Variability:	50
Terrain Database:	FCC 30 Second US database

The attached maps show both the FCC standard 70 dBu F(50,50) contour and the Longley/Rice model coverage. The Longley/Rice coverage is shown in both gradient color shading and as a calculated contour.

Exhibit 16-A shows the Longley Rice calculated 70dBu F(50,50) contour as the **mean** occurrence of a 70 db signal strength. Exhibit 16-B shows the Longley Rice calculated 70dBu F(50,50) contour as the more conservative **first** occurrence of a 70 db signal strength. As can be seen, either way it is calculated, the community of license is covered.

Conclusion

Based on the above exhibits the residents of Hotchkiss will be more than adequately served with a 70 dBu signal strength contour. EMF respectfully requests that the Commission permit this supplemental showing and grant its application.

Exhibit 16-A

KYKL.P

BPED20160429ABB
Latitude: 38-49-03.94 N
Longitude: 107-56-22.23 W
ERP: 6.00 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 1788.0 m
Horiz. Pattern: Omni
Prop Model: Longley-Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 9.0 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

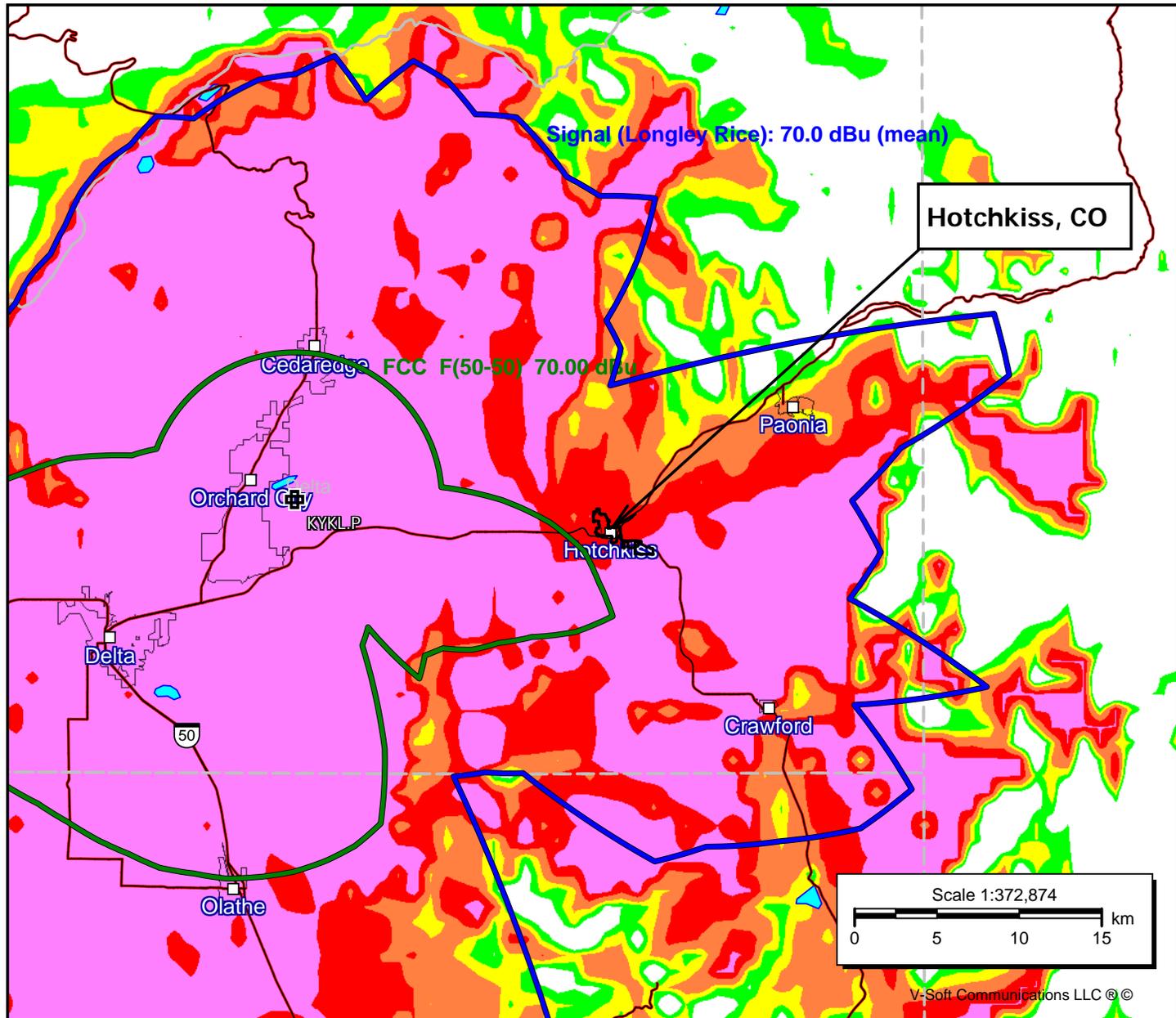
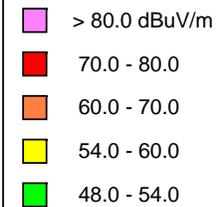
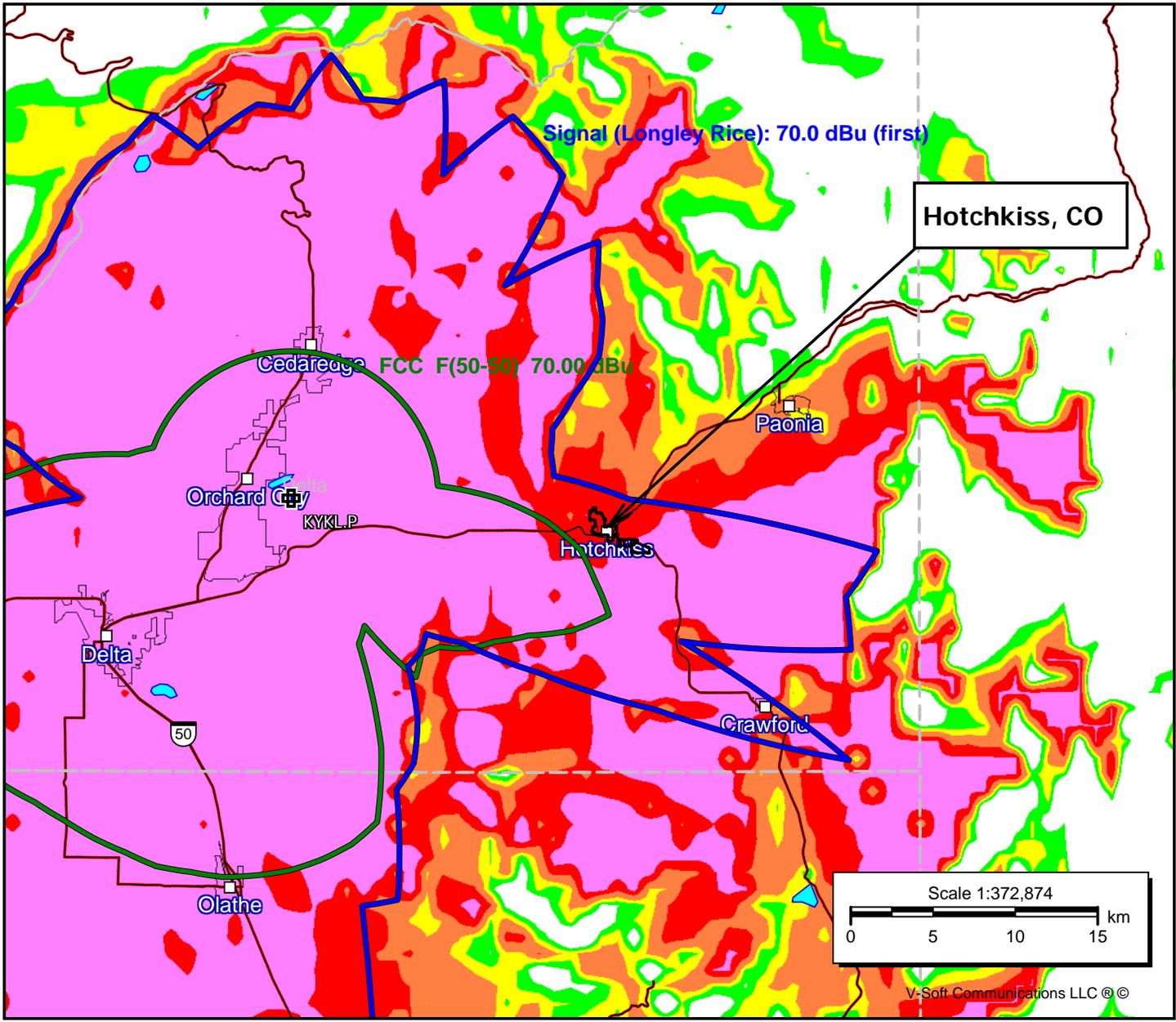
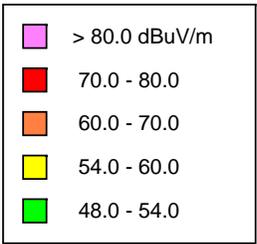


Exhibit 16-B

KYKL.P
 BPED20160429ABB
 Latitude: 38-49-03.94 N
 Longitude: 107-56-22.23 W
 ERP: 6.00 kW
 Channel: 245
 Frequency: 96.9 MHz
 AMSL Height: 1788.0 m
 Horiz. Pattern: Omni
 Prop Model: Longley-Rice
 Climate: Cont temperate
 Conductivity: 0.0050
 Dielec Const: 15.0
 Refractivity: 311.0
 Receiver Ht AG: 9.0 m
 Receiver Gain: 0 dB
 Time Variability: 50.0%
 Sit. Variability: 50.0%
 ITM Mode: Broadcast



Hotchkiss, CO

