

EXHIBIT E-1
TECHNICAL STATEMENT
W222CH MILLERS FALLS, MA
COUNTY BROADCASTING COMPANY, LLC
FCC FORM 349
JUNE, 2017

Introduction

This application is for modification of the facilities of an FM translator previously modified under the “250-mile window application” procedure set forth in the Commission’s AM Revitalization proceeding, MB Docket No. 13-249. The application requests a change in the currently permitted location of the transmitting facilities for the modified translator, and requests operation on Channel 222D with 99 watts effective radiated power, using a directional antenna, to provide fill-in service for AM Station WFAT, Orange-Athol, Massachusetts. In the previous ‘250 mile window’ application, the transmit location was approximately 78 miles from the original translator location, and this application proposes to move the site to approximately 85 miles from the original translator location, well within the original 250 mile requirement.

Fill-In Service

Figure 1 of this Exhibit shows that the 60dBu (1 mV/m) contour for the proposed operation of W222CH falls entirely inside a 25 mile radius around the transmitter site for WFAT AM, Orange-Athol, Massachusetts.

Interference Considerations

The proposed operation of W222CH conforms with the requirements of Section 74.1204 of the Commission’s Rules for an FM translator on Channel 222D with respect to overlap of predicted contours with the licensed operation of any FM station, LPFM station or FM translator, and the operation of any such facilities specified in a construction permit or pending application, on the same channel, the first, second, and third adjacent channels, as shown in this Exhibit. The proposed FM translator site is located within the predicted protected contours of one existing FM station on a third adjacent channel. This Exhibit demonstrates that, under Section 74.1204(d) of the Rules, no objectionable interference will be caused to this station. As the proposed facilities are under 100 watts ERP, the proposal is not subject to intermediate frequency distance separation requirements.

Figure 2 of this Exhibit shows the pertinent predicted contours for the proposed operation of W222CH and co-channel stations WFLY(FM), Albany, New York and WPRO-FM, Providence, Rhode Island.

The pertinent predicted contours for the proposed operation of W222CH and first-adjacent-channel FM stations WDER-FM, Peterborough, New Hampshire on channel

221A, WWYZ(FM), Waterbury, Connecticut on channel 223B, and WXRV(FM), Andover, Massachusetts on channel 223B are shown in Figure 3 of this Exhibit.

Figure 4 of this Exhibit depicts the pertinent predicted contours of the proposed operation of W222CH and the predicted protected contours of stations WKVT-FM, Brattleboro, VT, on Channel 224A, WNNZ-FM Deerfield, MA on Channel 219A and WOZQ (FM) Northampton, MA on Channel 220A on the second and third adjacent channels. As shown in Figure 4, the proposed site is located within the 60 dBu F(50,50) contour of WNNZ-FM.

With respect to WNNZ-FM, the predicted F(50,50) signal of WNNZ-FM at the proposed W246DH site is 121.3 dBu, and interference would occur where the translator signal is greater than 161.3 dBu. Based on the FCC's "Free Space" equation, the F(50/10) 161.3 dBu interfering contour extends 1 meter (see Figure 5, FCC Propagation Curves Calculation.) As a result of the height of the proposed antenna system at 15 meters above ground, signal levels of 161.3 dBu or greater would be developed only at heights of 15 meters or more above ground and only within 1 meter of the transmitting antenna.

Figure 6 of this Exhibit is the topographic map that depicts the vicinity of the proposed W222CH site. It is located on a mountain top with no populated area in the near vicinity. This application conforms with the requirements of Section 74.1204(d) of the Commission's Rules, as the three-dimensional space within which interference to WNNZ-FM may be expected does not include any places that could be considered to be populated, or any streets and highways, and the proposed operation of W222CH therefore would not result in objectionable interference to WNNZ-FM.

The site for the proposed modified translator is located within 320 kilometers of the Canadian border. With respect to the requirements of Section 74.1235(d) of the Commission's Rules, as shown in Figure 2, the 34 dBu F(50,10) contour for the proposed translator operation would not extend across the U.S.-Canada border.

The predicted contours shown in this Exhibit were determined in accordance with the requirements of Section 73.313 of the Commission's Rules, from computerized calculations based on the NGDC 30-second terrain database and Figures 1 and 1a of Section 73.333 of the Rules. Distances to the contours were calculated at azimuthal increments of one degree.

Figure 1
Translator Fill-In Service

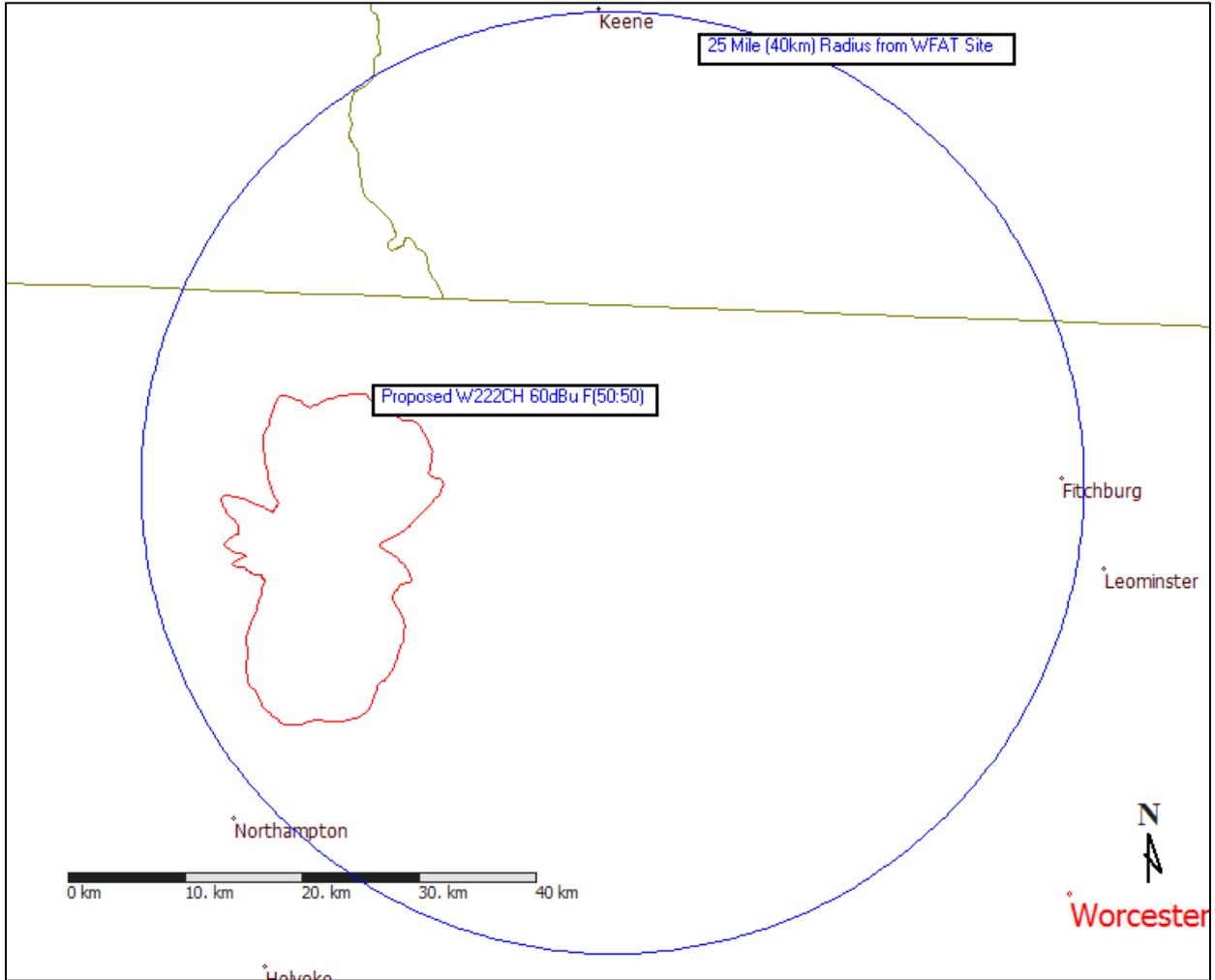


Figure 2
Co-Channel Interference Considerations

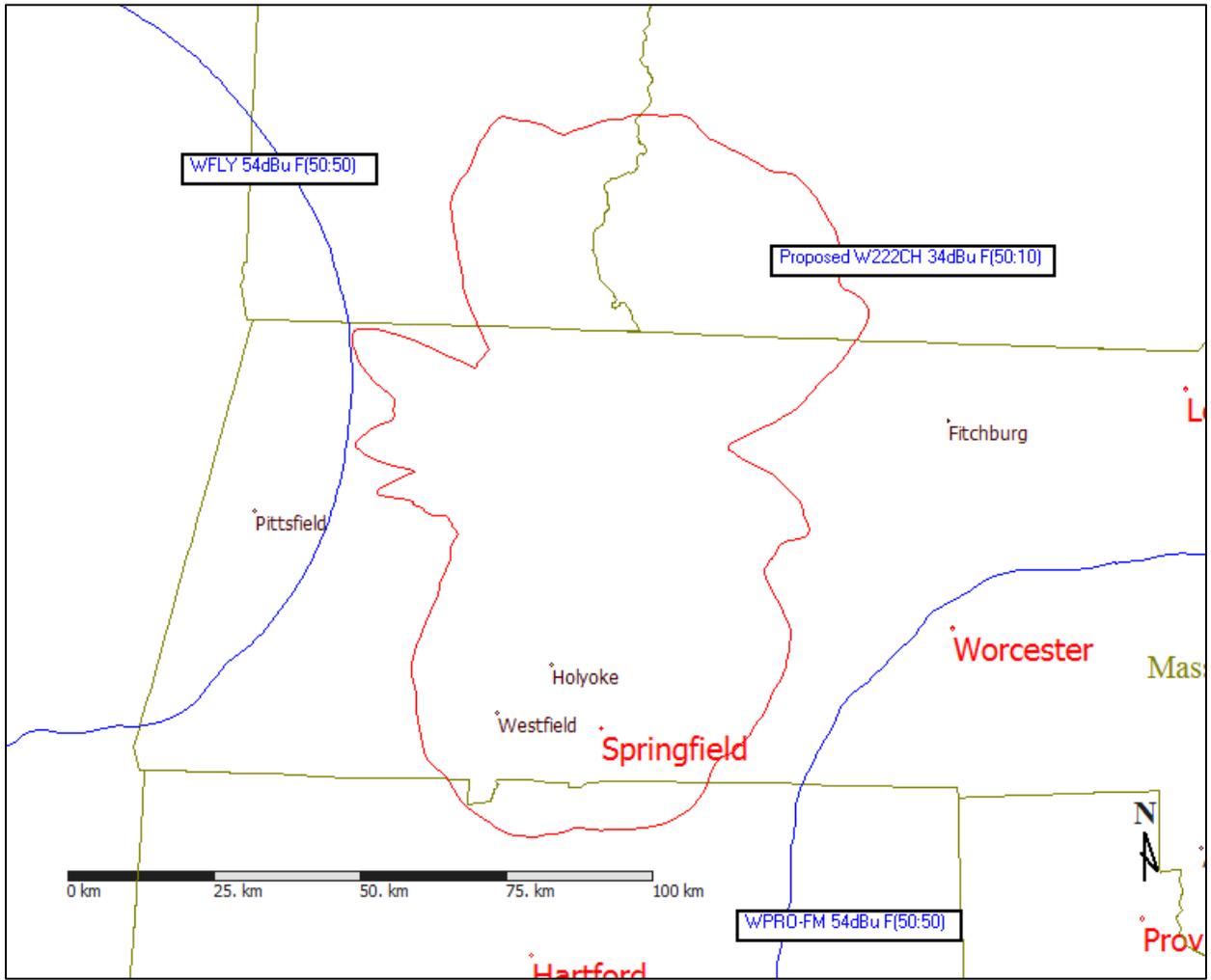


Figure 3
1st Adjacent Interference Considerations

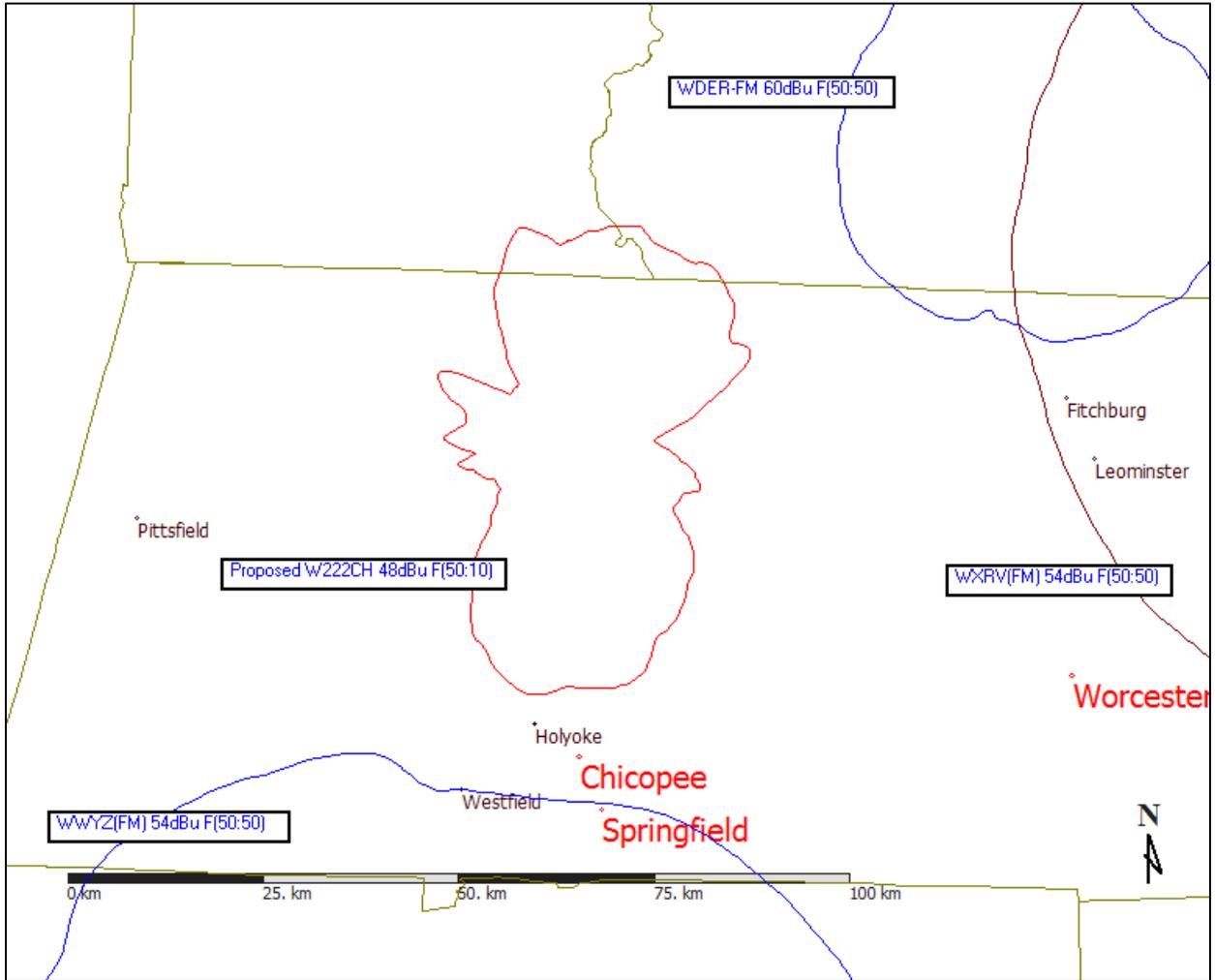


Figure 4

2nd and 3rd Adjacent Interference Considerations

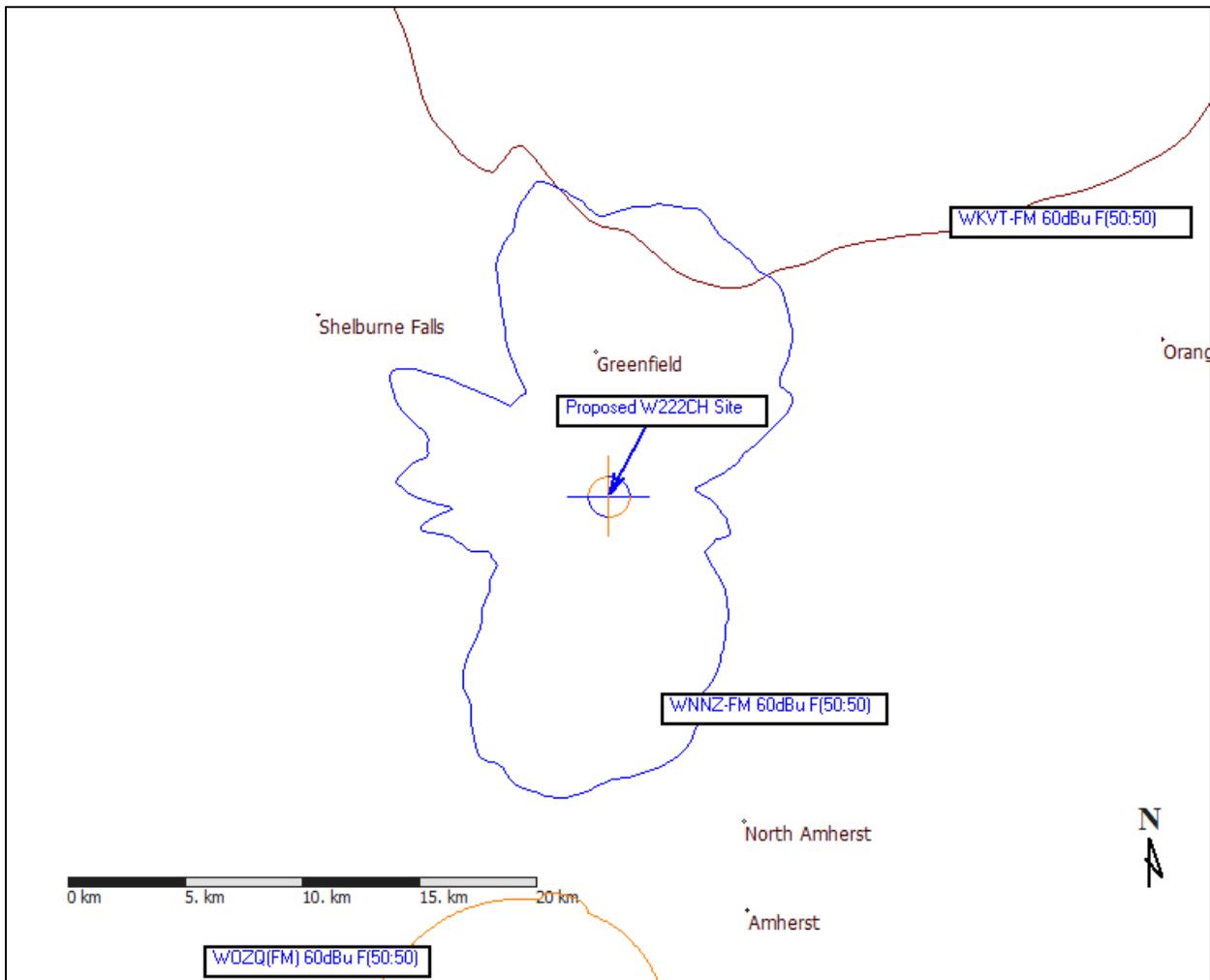


Figure 5

FCC Propagation Curves Calculation

Select Contour Type:

Select Channel Range: (not TV Virtual Channel)

Find This:

ERP (kW) Distance (km)

HAAT (meters) Field (dBu)

Results:

Calculated Distance = **0.001 km**

Free Space equation used to compute distance.

Figure 6

Topographic Map of Proposed Site

