

# **R. M. SMITH ASSOCIATES**

BROADCAST TECHNICAL CONSULTANTS  
10920B CROWN COLONY DRIVE – AUSTIN, TX 78747  
Tel: (512)-294-2334 - Cell: (772)-485-7548  
E-MAIL bob@rmsmith.com

## **WAIVER REQUEST**

### **ON BEHALF OF**

**NEW HAMPSHIRE PUBLIC RADIO, INCORPORATED**

**APPLICATION FOR MINOR MODIFICATION OF LICENSE**

### **OF**

**WEVF(FM) – 212A – COLEBROOK, NEW HAMPSHIRE**

### **PURPOSE AND SCOPE**

New Hampshire Public Radio, Incorporated (“NHPR”) hereby requests a waiver of 47 C.F.R. §73.509(a) with respect to incoming prohibited contour overlap (interference to WEVF from WMEA) with WMEA(FM), 211C, Portland, ME (F.C.C. File No. BLED-19990525KB). No outgoing prohibited overlap will occur, so no waiver is needed for outgoing contour overlap.

### **CALCULATED OVERLAP**

Figure 1 of this request is a plot of the protected 60 dBu f(50,50) contour generated by the proposed operation of WEVF(FM) and the 54 dBu f(50,10) contour of the licensed facilities of WMEA(FM). As shown, the WMEA(FM) 54 dBu (in red) has a minor overlap with the proposed WEVF(FM) 60 dBu (in green). Also shown is the licensed WEVF(FM) 60 dBu (in blue). As detailed below, NHPR believes it is in the public interest to waive the shown overlap of the proposed 60 dBu. Also shown is the path profile origination and termination discussed below.

## BENEFITS OF PROPOSED OPERATION

The present operation of WEVF(FM) provides 60 dBu f(50,50) coverage to an area of 1404 km<sup>2</sup> and a population of 6,185 persons (2010 Census). The proposed operation will provide 60 dBu f(50,50) coverage to an area of 2442 km<sup>2</sup> and a population of 7,126 persons (2010 Census). The increase in coverage area is 74% and increase in population is over 15%.

## JUSTIFICATION FOR WAIVER

The applicant believes the waiver is justified for the following reasons:

1. The area calculated to receive interference is small. The impacted area is 39.8 km<sup>2</sup> or 1.6% or the total 60 dBu service area.
2. The area calculated to receive interference has a population of zero in the 2010 Census.
3. The calculated interference is overstated, and no actual interference will occur due to intervening terrain.

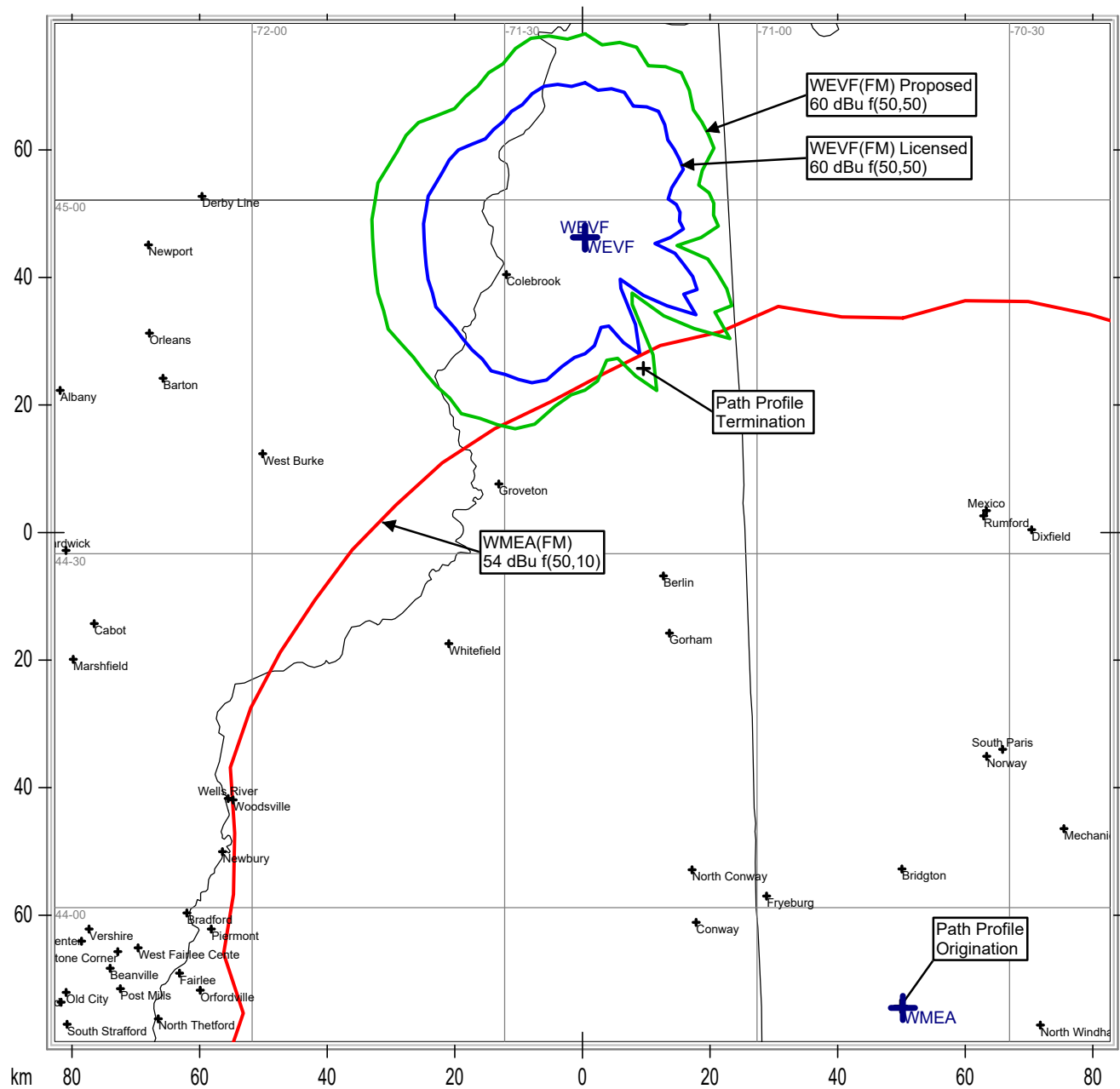
Figure 2 of this request is a terrain profile from the WMEA(FM) antenna (labeled on Figure 1 as “Path Profile Origination”) to a receiving antenna at 9 meters above ground at a location within the area calculated to receive interference (labeled on Figure 1 as “Path Profile Termination”). The profile clearly shows that the terrain between the two sites is mountainous and the signal from WMEA(FM) will be blocked by terrain well before reaching the WEVF(FM) coverage area.

Figure 3 of this request shows the area receiving 54 dBu or better coverage (shaded green) from WMEA(FM) as calculated using the Longley-Rice prediction algorithm. The Longley-Rice parameters were adjusted to 50% Location and 10% Time. As the plot shows, the interfering 54 dBu signal level falls far short of the WEVF(FM) 60 dBu area.

## CONCLUSIONS

A grant of the waiver, herein requested, is justified and in the public interest. The waiver will allow WEVF(FM) to increase its coverage with no actual interference to the proposed 60 dBu coverage area.

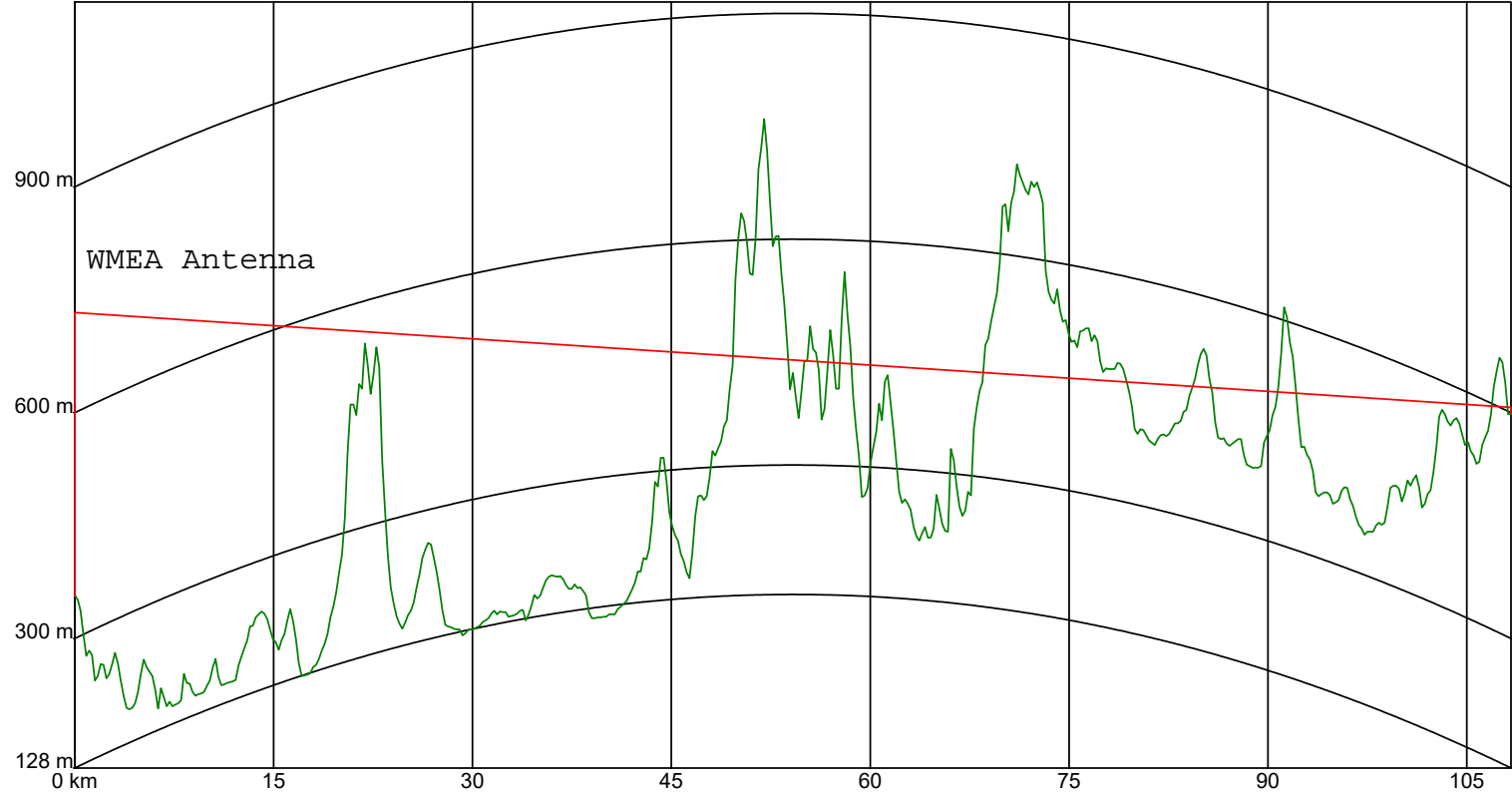
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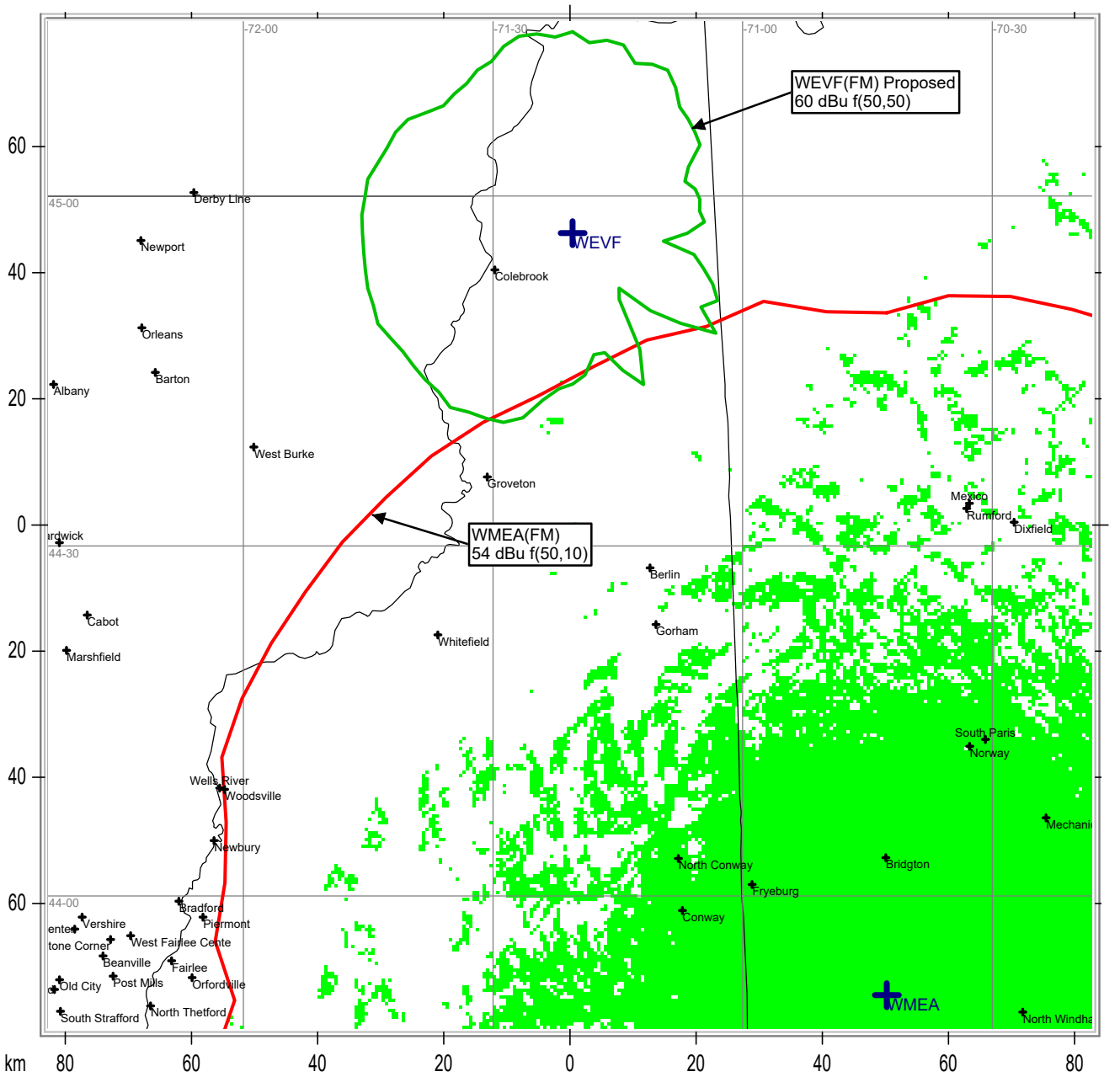
State Borders Lat/Lon Grid

**ComStudy 2 Path Profile**



Waiver Request Figure 2

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State Borders Lat/Lon Grid