

**NOSTALGIA ONE PUBLIC RADIO, INC.**  
**APPLICATION FOR NCE-FM ON**  
**CHANNEL 209 - 89.7 MHZ - .400 KW**  
**LISBON, NEW HAMPSHIRE**  
**OCTOBER, 2007**

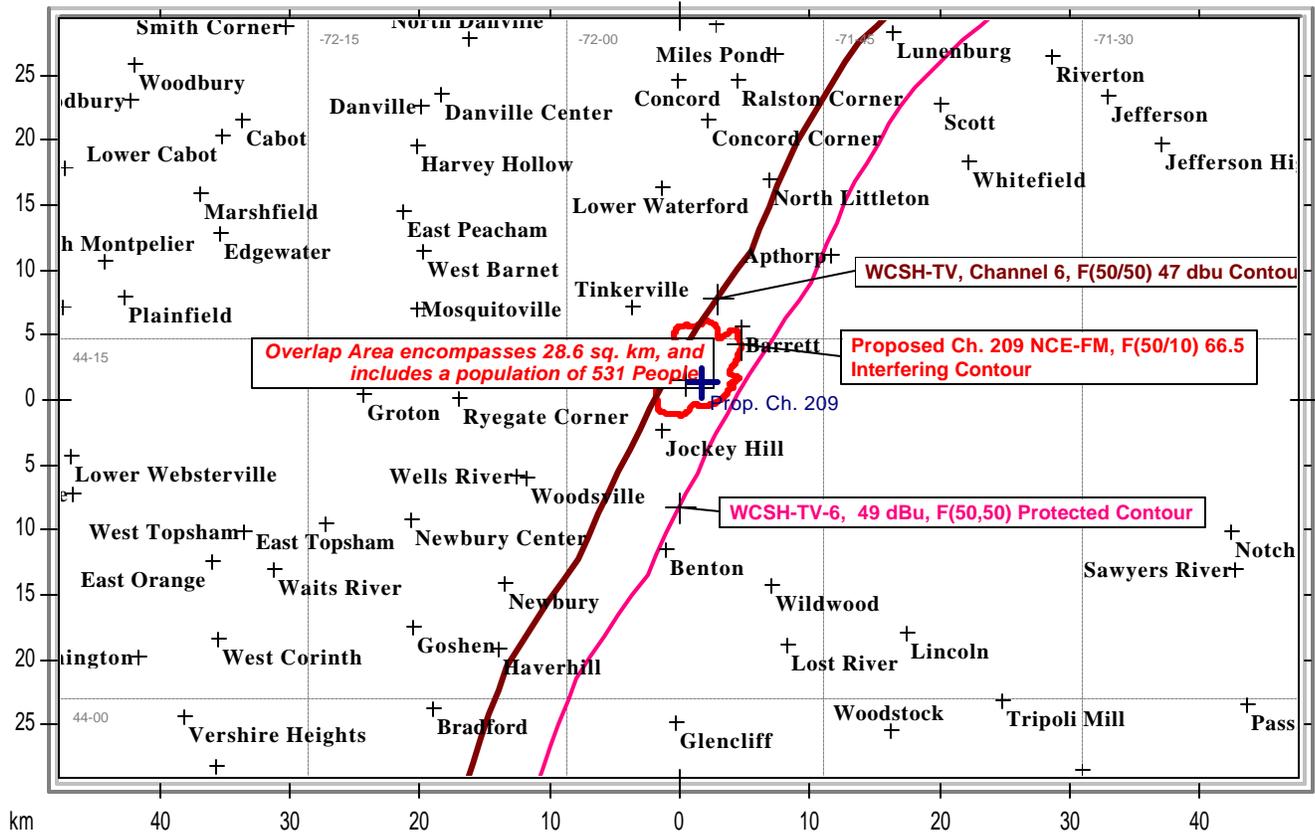
TV Channel 6 Protection

There is only 1 full power TV or Class A LPTV station on Channel 6 within 196 km. of the proposed Channel 209 NCE FM at Lisbon, New Hampshire. WCSH at Portland, Me. is 102.19 km. distant and thus is an affected station under 73.525. The proposed facility will employ vertical-only ERP and the interference area is located entirely outside of any city with a population of 50,000 or more. Therefore, the formula in 73.558(c)(4)(i) was employed to reduce the proposed NCE ERP by a factor of 40 for purposes of determining the population and area affected by the interference (e.g. study was performed at 10 Watts.)

The Exhibit below shows the relevant service contour of WCSH Channel 6, and the pertinent interfering contours of the proposed new NCE FM. The affected area and population were ascertained using an approach that is more conservative than the locus of contour intersections technique. The interfering contour level of 66.5 dBu F(50,10) was ascertained by adding the 17.5 dB undesired to desired signal ratio from 73.599 Figure 1 that is applicable to the WCSH 49 dBu service contour (the most conservative U/D ratio) to the 47 dBu service contour (the most conservative WCSH service contour.)

The affected area and population count were determined utilizing the RadioSoft ComStudy program by counting the population within the proposed new NCE FM 66.5 dBu F(50,10) interfering contour. The affected population is 531 persons in an area of 28.3 sq. km. Since the area contains far fewer than 3,000 persons, the proposal complies with 73.525(c).

Study Power, 10 Watts ERP, Shows 66.5 dBu, F(50,10) Interfering Contour



Overlap Area Shows 28.63 sq. km, 531 People, Thus Complies with 73.525

— Lat/Lon Grid