

## Engineering Exhibit

Contour Protection  
WNYN-FM Whitefield, NH  
Form 301, Channel 256A  
October 9, 2015

WNYN-FM is filing the 301 application to meet rule section 73.1690(b)(2) requirements due to the existing tower being replaced at the same coordinates. A reduction in ERP is also specified to prevent a tiny amount of overlap with the WOKO 54 dBu (50:10) contour discovered when reviewing the current facilities.

This exhibit will show continued compliance with contour protection rules under the provisions of section 73.215, towards channel 255C1 allocated to Burlington VT. This exhibit will also show there will continue to be no interference with an allocation in Lac-Bromel, QC.

*Figure 1* shows the site proposed, N 44-21-10, W 71-44-15 will meet the minimum separation requirements under section 73.215 toward WOKO. The minimum separation under section 73.215 between the proposed Class A operation on channel 256 and the class C1 operation on channel 255 is 111 km. The actual distance between the current WNYN-FM location and the WOKO licensed location, N 44-27-03 W 73-11-51 is 117 km.

The current WNYN-FM location and WOKO were evaluated for contour overlap. WOKO was adjusted for operation at its potential maximum class C1 facilities at the licensed coordinates.

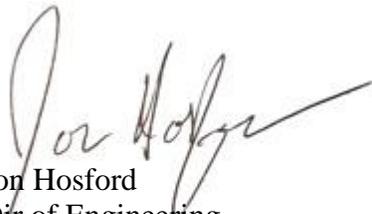
It is proposed to operate WNYN-FM at Whitefield NH with an effective radiated power of 0.645 kilowatts with an antenna height above average terrain of 346 meters. This is 0.015 kW lower than the current ERP to prevent a tiny amount of overlap with the 54 dBu (50:10) contour discovered when reviewing the current facilities.

*Figure 2* shows the contours of WOKO operating at maximum facilities and the WNYN-FM operation on channel 256A utilizing the specified directional antenna at 0.645 kW. There is no prohibited overlap.

The current WNYN-FM site is short-spaced to a proposed co-channel allotment for Channel 256A at Lac-Bromel, Quebec. The spacing between the WNYN-FM site and the Lac-Bromel allotment is 115 kilometers, and the required spacing is 151 kilometers. The WNYN-FM location and the Canadian station at Lac-Bromel, QC on channel 256A were evaluated for contour overlap.

*Figure 3* shows the contours of Lac-Bromel, QC operating at licensed facilities and WNYN-FM's operation on channel 256A utilizing the specified directional antenna. As shown in *Figure 3* of this Exhibit, WNYN-FM's operation would not result in interference to the Lac-Bromel allotment in Canada, and would not receive interference from the Lac-Bromel allotment in the United States.

It was concluded that the WNYN-FM operation at Whitefield NH on channel 256A at the location specified will continue to meet all of the provisions under section 73.215 of the Commission rules, and cause no interference to Canadian stations.



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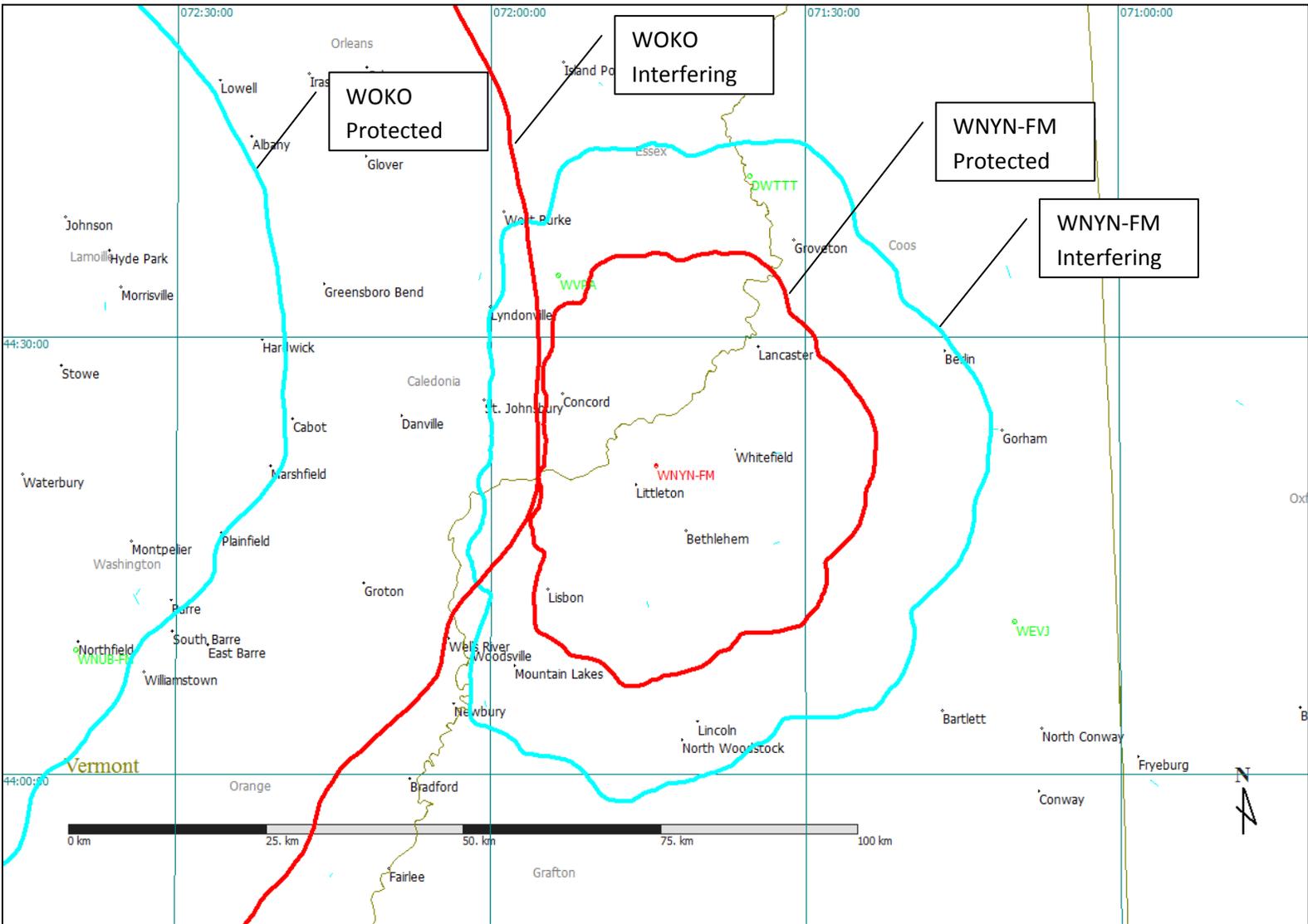
**Figure 1, WNYN-FM Engineering Exhibit**

Licensed coordinates 44-21-10 N 71-44-15 W (No change Proposed)

Callsign	Service	Channel	Class	Intl		City	State	73 207		73 215		Distance
				Class	Class			Min	Clear	Min	Clear	
NEW	FM	256 : 99.1 MHz	A	A	LAC-BROME	QC	151	-36	0	115	115	
WOKO	FM	255 : 98.9 MHz	C1	C1	BURLINGTON	VT	133	-16	111	6	117	
DWTTT	FM	254 : 98.7 MHz	A		STRATFORD	NH	31	8	25	14	39	
WNNH	FM	256 : 99.1 MHz	A	A	HENNIKER	NH	115	12	92	35	127	
WVPA	FM	203 : 88.5 MHz	C2		ST. JOHNSBURY	VT	15	12	0	27	27	
WFRD	FM	257 : 99.3 MHz	A		HANOVER	NH	72	18	49	41	90	
WEVJ	FM	258 : 99.5 MHz	A		JACKSON	NH	31	19	25	25	50	
WCLZ	FM	255 : 98.9 MHz	B		NORTH YARMOUTH	ME	113	34	96	51	147	
CJAN-FM	FM	257 : 99.3 MHz	B1	B1	ASBESTOS	QC	119	37	0	156	156	
INTL:VAC	FM	257 : 99.3 MHz	A	A	WINDSOR	QU	98	38	0	136	136	
WKTJ-FM	FM	257 : 99.3 MHz	A	A	FARMINGTON	ME	72	55	49	78	127	
WNUB-FM	FM	202 : 88.3 MHz	A		NORTHFIELD	VT	10	67	0	77	77	
WNTK-FM	FM	259 : 99.7 MHz	A		NEW LONDON	NH	31	72	25	78	103	
INTL:VAC	FM	256 : 99.1 MHz	C1	C1	OTTAWA-HULL	ON	243	75	0	318	318	
WBQQ	FM	257 : 99.3 MHz	A	B1	KENNEBUNK	ME	72	76	49	99	148	
	FM	256 : 99.1 MHz	B1	B1	GABRIEL DE BRANDON	QC	184	77	0	261	261	
WEBB	FM	253 : 98.5 MHz	C1	C1	WATERVILLE	ME	75	96	69	102	171	

WNYN-FM

FIGURE 2



WNYN-FM

Figure 3

