

## **ENGINEERING STATEMENT**

Concerning the Application of  
Vermont Public Radio  
To Make a Minor Change to  
WVPR  
BLED-19910212KB  
Windsor, Vermont

June 2004

### **Channel 208B**

**1.7 kW H + V ERP**

This engineering statement supports the application filed by Vermont Public Radio to make a minor change to WVPR, File No. BLED-19910212KB, Windsor, Vermont. During the recent installation of co-located station WNCH (BLED-20040521ABG), it was discovered that the WVPR antenna was at a height not consistent with the license. This application is to correct the antenna height above ground and the coordinates of the transmitter location. The antenna has neither moved locations nor positions on the tower. The effective radiation power of the antenna has been reduced to 1.7 kW.

By increasing the antenna height above ground and decreasing power, the resulting 60 dBu contour is contained entirely within the 60 dBu of the authorized facility. Tables of the distances to the 60 dBu contour are found on pages 2-3 of this engineering statement.

**Exhibit #15** – The proposed changed facility complies with Section 73.509, with regard to providing contour protection for all existing stations, construction permits and applications.

**Exhibit #18** – There are two television channel 6 stations within the 196 kilometer cutoff distance for FM channel 208: WCSH, 100 kW at a distance of 148 km, along 70.1° and WRGB, 93.3 kW, 154 km, 235.2°. The decrease in ERP in both the horizontal and vertical planes results in a reduction in study power for television channel six protection. The new study power is 1.87 kW (1.7 kW H + 1.7 kW V/10). Pages #1-2 are maps of the protected 47 dBu contour of each TV6 station, as well as the interference contours of the proposed FM. The 6 dB receiver directivity credit was applied. Pages 3-5 are distance to contour tables for each facility.

A new RF emissions study was deemed unnecessary, as the proposal increases antenna height above ground and decreases power, thereby decreasing the levels of RF emissions on the ground.

Page #4 of this exhibit is a declaration made by the preparer, Kate Michler, attesting to her qualifications.

Doug Vernier Telecommunications Consultants

N. Lat. = 43 26 15 W. Lng. = 72 27 08

HAAT and Distance to Contour - FCC Method - 30 Arc. Sec.

WVPR Antenna Height/Coordinate Correction

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	287.8	687.2	1.7000	2.30	1.000	52.86
045	197.9	777.1	1.7000	2.30	1.000	55.66
090	305.8	669.2	1.7000	2.30	1.000	52.25
135	189.4	785.6	1.7000	2.30	1.000	55.90
180	264.1	710.9	1.7000	2.30	1.000	53.64
225	275.1	699.9	1.7000	2.30	1.000	53.28
270	370.0	605.0	1.7000	2.30	1.000	49.93
315	361.6	613.4	1.7000	2.30	1.000	50.25

Ave El = 281.46 M HAAT= 693.54 M AMSL= 975 M

Doug Vernier Telecommunications Consultants

N. Lat. = 43 26 15 W. Lng. = 72 27 08

HAAT and Distance to Contour - FCC Method - 30 Arc. Sec.

WVPR , Vermont Public Radio, BLED19910212KB - Corrected coordinates

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	287.8	677.2	1.8000	2.55	1.000	53.08
045	197.9	767.1	1.8000	2.55	1.000	55.92
090	305.8	659.2	1.8000	2.55	1.000	52.46
135	189.4	775.6	1.8000	2.55	1.000	56.17
180	264.1	700.9	1.8000	2.55	1.000	53.87
225	275.1	689.9	1.8000	2.55	1.000	53.51
270	370.0	595.0	1.8000	2.55	1.000	50.11
315	361.6	603.4	1.8000	2.55	1.000	50.43

Ave El = 281.46 M HAAT= 683.54 M AMSL= 965 M

**Declaration:**

I, Katherine A. Michler, have received a Bachelor of Science degree from the University of Northern Iowa, and;

That, I declare that I have received training as a technical consultant as a member of the staff of Doug Vernier Telecommunications Consultants, and;

That, I have apprenticed under Douglas Vernier for over six years, and;

That, he has been active in broadcast consulting for over 25 years, and;

That, his qualifications are a matter of record with the Federal Communications Commission, and;

That, I am an Associate Member (#20792) of the Society of Broadcast Engineers, Indianapolis, Indiana, and;

That, the consulting firm of Doug Vernier Telecommunications Consultants has been retained by Vermont Public Radio, Colchester, Vermont.;

That, I have personally prepared these engineering showings, the technical information contained in same and the facts stated within are true to my knowledge, and;

That, under penalty of perjury, I declare that the foregoing is correct.

Katherine A. Michler Katherine A. Michler

Executed on June 17, 2004