



**EXHIBIT #1**  
**ENGINEERING STATEMENT**

**MINNESOTA PUBLIC RADIO**  
New Station Application  
Grand Rapids, Minnesota  
September 2007

CH 209C3

9.7 kW H & V Omni

This engineering statement supports application filed by Minnesota Public Radio for a new non-commercial educational FM station to serve Grand Rapids, Minnesota.

**Exhibit #11** is a Fair Distribution of Service study, showing that more than 10% of the population within the proposed 60 dBu contour will receive second NCE FM aural service.

**Exhibit #14** shows the required coverage of the prospective community of license, Grand Rapids, Minnesota. The coverage map on page #1 of this exhibit shows that the proposed facility meets the community coverage requirements of Section 73.515.

A total of 36 evenly spaced radials were used to determine the antenna height above average terrain. The USGS 3 arc-second terrain elevation database was employed to determine the elevations along the radials that were averaged using the required four-point interpolation method. The resulting averaged radial antenna heights were employed using the Commission's own TVFMINT algorithm to project the distances to signal contours. A tabular listing of the distance to the 60 dBu contour can be found on page #2 of Exhibit #14.

**Exhibit #16** is an Allocation Report showing that there is no prohibited contour overlap with any existing license, construction permit or application.

The proposed station is within 320 km of the U.S. border with Canada, but there are no pertinent relationships with Canadian Stations. The proposed station is not within the specific critical distances to AM broadcast towers, FCC monitoring stations, Table Mountain and the West Virginia Quiet Zone. The applicant is aware of its responsibility under the rules to correct any blanketing interference that it may cause within the period of one year from commencement of transmissions of newly authorized facilities.

**Exhibit #19** concerns protection to television channel 6.

The applicant proposes the use of registered tower #1024447, constructed in 1990. As this tower was built before March, 2001, it is excluded from environmental testing under Section 1.1306.

**Exhibit #22** is an R.F. emissions compliance statement, showing that workers and the general public are protected from excess radio frequency emissions.

Page #3 of Exhibit #1 is a statement of the qualifications of the preparer.

Kate Michler

**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 been a member of the firm for over nine years, and;

That, my 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 Minnesota Public Radio, and;

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 September 14, 2007