

## **ENGINEERING STATEMENT**

This engineering statement has been prepared on behalf of Grant Educational Foundation (GEF) to provide supplemental information in support of its application (BNPEDT-20030922AFW) for a new non-commercial educational digital TV station at Sacramento, California. The Commission has allotted digital Channel 43 to Sacramento, California under Report & Order in MB Docket No. 02-93, RM-10414. The Media Bureau announced a filing window on August 8, 2003 for the new digital noncommercial educational reserved channel television station on Channel 43 at Sacramento, California.

In response to the filing window, GEF filed its application (BNPEDT-20030922AFW) on September 22, 2003. GEF proposed to operate its new digital TV (DTV) station on Channel 43 with 100 kW maximum effective radiated power (ERP) and 304 meters antenna height above average terrain using a directional TV antenna. In its application, GEF stated that its proposed Channel 43 DTV operation would provide interference-free service to 1,666,941 people (1990 census) within the noise limited contour (41 dBu). The purpose of this supplemental filing is to provide more accurate population data within the noise-limited contour (41 dBu) of the proposed Channel 43 DTV operation based on the 2000 census of the United States. GEF does not propose any changes to the technical parameters filed in its application for the proposed DTV station.

It is estimated that the proposed GEF Channel 43 DTV station would serve 2,207,702 people and 13,264 square km area within the noise-limited contour (41 dBu). This determination is based on computing the proposed 41 dBu contour using eight cardinal radials plus additional radials every ten degrees in conjunction with directional DTV antenna to better define the contour.

Under penalty of perjury the undersigned states that the foregoing statement has been prepared by him or under his supervision and that the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts, he believes them to be true.

14 January 2004



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