

## **Request for Waiver of 121 km / 75 Mile Geographic Restriction Rule**

Station K44HO, Los Alamos / Espanola, New Mexico  
Fac. ID No. 127924 FRN: 0001608025

The Regents of the University of New Mexico and the Board of Education, Albuquerque, New Mexico (“University”), permittee of noncommercial educational television translator station K44HO, Los Alamos / Espanola, New Mexico, hereby requests a waiver of the 121 kilometer / 75 mile restriction on relocation of television translator stations imposed by the Commission in *In re Scheduling of Limited Low Power Television / TV Translator / Class A Television Auction Filing Window from July 31 Through August 4, 2000* (Public Notice Re. May 1, 2000) (“Distance Restriction Public Notice”). The University submits that a waiver of the distance restriction is justified because the proposed K44HO facilities are terrain shielded and engineered such that no harmful interference will affect stations in the applicable protected market cities listed in the Distance Restriction Public Notice. Moreover, waiver of the distance restriction is in the public interest because the grant of a waiver will allow the University to ensure that viewers in the largely rural areas and Native American tribal communities that K44HO will serve will receive digital public television service that would otherwise not be available due to terrain blockage problems.

### **Background**

On March 30, 2006, the University filed a displacement application for unbuilt Station K44HO proposing to relocate the station’s transmitter and specify operation on NTSC Channel 22. *See* FCC File No. BDISTT-20060330AMG. As the University explained in its displacement application, the displacement of Station K44HO from Channel 44 is necessary in order to resolve lower adjacent channel interference to full-power DTV station KASY-DT, authorized to operate on Channel 45.

The University was aware in March 2006 that the proposed location for the displacement facilities for K44HO fell within the 75 mile distance restriction announced in the Distance Restriction Public Notice. Therefore, prior to the filing of the University’s original displacement application for K44HO, counsel for the University consulted with FCC staff about the possibility of requesting a waiver of the 75 mile distance restriction. FCC staff advised counsel for the University to include a Longley-Rice study showing that no harmful interference would reach the protected market cities, and that if the University could make such a showing, the FCC would grant a waiver. The University submitted its displacement application and included a request for waiver of the distance restriction, providing an interference study showing that the proposed NTSC Channel 22 operation would not cause harmful interference to any existing or unbuilt station in the two applicable protected market cities, Albuquerque and Santa Fe, New Mexico. *See Id.*

After the University submitted its displacement application, the Commission tentatively designated Channel 22 as the digital allotment for full-power television Station KTFQ-TV, Albuquerque, New Mexico. *See In re Tentative Digital Channel Designations for Stations Participating in the First and Second Rounds of the DTV Channel Election Process*, Public Notice, DA 06-1082 (Rel. May 23, 2006). This designation effectively prevented grant of the

K44HO analog displacement application, and the University began searching for a viable replacement channel. Subsequently, on July 24, 2006, the Commission dismissed the University's analog displacement application, citing the 75 mile distance restriction in the Distance Restriction Public Notice as the sole basis for the dismissal.

The instant application is a combination displacement and digital flash cut application for Station K44HO, specifying operation on Channel 49 at approximately the same transmitter location proposed in the University's earlier displacement application in FCC File No. BDISTT-20060330AMG. In light of the Commission's dismissal of the first displacement application on the basis of the 75 mile distance restriction announced in the Distance Restriction Public Notice, the University is submitting this request for waiver of the distance limitation for its digital flash cut and displacement application for K44HO. As demonstrated below, a waiver of the rule is justified as the University can demonstrate that terrain shielding and the use of a directional antenna prevents harmful interference to the nearest protected television market cities, and waiver of the restriction will serve the public interest.

### **Justification**

#### **I. The Proposed Displacement Facilities Will Not Cause Harmful Interference to the Protected Market Cities of Albuquerque and Santa Fe, New Mexico.**

The Commission stated in the Distance Restriction Public Notice that it would not allow applications for new or major changes to television translator stations proposing antenna site coordinates located less than 75 miles from the reference coordinates of the cities listed in an attachment to the same Notice. The Commission explained that the restriction was necessary due to the FCC's implementation of DTV service across the country. However, the FCC also stated that it would "consider requests for waiver of the geographic restrictions based on terrain shielding," and in particular noted that waivers would be appropriate where substantial terrain obstructions were present, such as the "large mountain ranges in the western states." *See* Distance Restriction Public Notice at p. 2. The Commission stated in the Distance Restriction Public Notice (and FCC staff confirmed with counsel for the University) that applicants could demonstrate terrain shielding for the purposes of seeking a waiver by submitting appropriate Longley-Rice signal propagation prediction studies with the waiver request. *Id.*

The University respectfully submits that the proposed displacement and digital flash cut operation for K44HO should be granted a waiver of the 75 mile restriction established by the Distance Restriction Public Notice. The area to be served by Station K44HO is precisely the type of mountainous terrain in a western state that the Commission noted would cause significant terrain shielding. In this case, the proposed facilities for Station K44HO are largely (but not completely) terrain shielded. Nevertheless, as demonstrated by the interference study attached to the instant application, whatever portions of Station K44HO's proposed operation would not be outright blocked by mountain terrain, the antenna system has been engineered such that operation of K44HO on Channel 49 at the proposed antenna site will not cause harmful interference to any existing or unbuilt station in either Albuquerque or Santa Fe, New Mexico. *See* Exhibit 11. The University proposes to use a directional antenna for K44HO in order to ensure that the Albuquerque and Santa Fe broadcast markets will not be affected by the operation of the station at its proposed location. The combination of the University's use of a directional

antenna and the natural signal blockage of the surrounding mountainous terrain effectively block any harmful interference from reaching either Albuquerque or Santa Fe.

Although the University believes that its demonstration of terrain shielding and no interference to the protected markets of Albuquerque and Santa Fe adequately justifies a waiver of the 75 mile geographic restriction, the University also notes that it is clear from the context of the Distance Restriction Public Notice that the purpose behind the 75 mile restriction was to ensure that full-power DTV stations operating in the protected market cities would have the opportunity to “settle” on their permanent DTV channels before significant changes to secondary service translators would be allowed. This rule, established in May 2000, was necessary in order to minimize disruption to translator stations so that an orderly transition from analog to DTV broadcasting could take place.

More than six years have passed since the FCC imposed the geographic restriction on secondary service television stations, and full-power DTV stations all across the country are (with a few exceptions) set in place and simulcasting with their analog station counterparts. The Commission has already begun to address the digital future of TV translator stations, first through the acceptance of digital flash-cut applications (such as the instant application) and most recently by conducting a filing window for television translator stations to obtain digital companion channels. The University respectfully submits that at this late date in the transition process, with the digital conversion of television translator stations already well underway, it makes little sense for rigid application of the 75 mile geographic restriction—particularly where, as here, the University can demonstrate that no harmful interference to any station in a protected market city will occur.

## **II. Grant of a Waiver Is In the Public Interest.**

The University submits that grant of a waiver of the 75 mile distance restriction and authorization to operate K44HO at the proposed antenna site will best serve the public interest. Station K44HO will serve a portion of northern New Mexico marked by rugged, mountainous terrain that causes signal “shadows” in numerous places. Indeed, one of the purposes served by Station K44HO will be to fill in signal coverage gaps caused by terrain shielding that makes it impossible for some viewers in the area to receive the broadcast signal of the University’s full-power station, KNME-TV/DT. As a result, when constructed, Station K44HO will provide the sole means by which viewers in some areas will be able to receive any broadcast public television service. Many of the areas that K44HO will serve are smaller communities and outlying towns with sparse populations. In addition, the communities of Los Alamos and Espanola, New Mexico, are themselves smaller communities. According to 2000 U.S. Census data, Los Alamos has a population of approximately 11,909 persons, while Espanola has a population of just 9,688 persons.

Moreover, the unserved areas where the University is not currently able to deliver a quality broadcast signal from its full power Station KNME-TV/DT include portions of three small Native American communities at Pojoaque Pueblo, San Juan Pueblo, and Nambe Pueblo.<sup>1</sup>

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<sup>1</sup> More information on these tribal communities can be found on the New Mexico Tourism Department website, *available at* [www.newmexico.org/place/loc/travel/page/DB-](http://www.newmexico.org/place/loc/travel/page/DB-)

Portions of these tribal communities currently do not receive broadcast public television signal due to the terrain shielding problems endemic to the area. However, once the University's Station K44HO is fully constructed at the proposed site, these communities (as well as several others in the area with similar terrain shielding problems) will finally be able to receive the University's top-notch digital public television programming. Accordingly, the University submits that grant of a waiver of the 75 mile restriction is justified in order to allow Station K44HO to provide viewers living in sparsely populated areas with the University's broadcast digital public television service.

The University has a long history of delivering quality educational television programming to isolated and rural communities across New Mexico, and, in particular, to places where terrain considerations make delivery of any broadcast signals exceedingly difficult. Notwithstanding these challenges, and commensurate with its status as an educational institution dedicated to fostering learning throughout the state, the University continues to look for ways to extend the reach of its services to as many New Mexicans as possible. In fact, the University was awarded a grant from the Department of Commerce / National Telecommunications and Information Administration's Public Telecommunications Facilities Program ("PTFP") that will, in part, cover a portion of the cost of constructing Station K44HO. *See* PTFP Grant No. 35-02-N05057 (awarded Sept. 26, 2005). The PTFP grant award includes funding for construction of four translator stations (including K44HO) that will collectively deliver first service to over 174,000 persons in New Mexico.

### **Conclusion**

The University remains dedicated to bringing new digital public television service to unserved areas in and around the communities of Espanola and Los Alamos via Station K44HO. As explained elsewhere in the instant application, due to the unforeseen interference problem with KASY-DT (which only arose after KASY-DT's digital channel allotment changed), the University has been forced to find a new home for K44HO. The University has carefully considered its options and has concluded that operation at the proposed antenna site presents the best solution. In light of the significant public interest benefit that will result from the delivery of new educational broadcast service to the rural areas that K44HO will serve, as well as the fact that terrain blockage and the use of a directional antenna will eliminate any harmful interference from any existing or unbuilt station in Albuquerque or Santa Fe, New Mexico, the University submits that waiver of the Commission's 75 mile geographic restriction is justified and respectfully requests that the FCC grant the requested waiver.

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place/category/300/place/177.html (Pojoanque Pueblo);  
<http://www.nmtourism.org/place/loc/travel/page/DB-place/category/300/place/195.html> (San Juan Pueblo); and <http://www.nmtourism.org/place/loc/travel/page/DB-place/category/300/place/175.html> (Nambe Pueblo).