

Engineering Statement and Interference Analysis

This application modifies BDFCDVL-20110826ABL, a digital flash cut facility for KFMP-LD, Channel 6, Lubbock TX, Facility ID 129734.

The proposed channel 6 facility was studied using the Techware's tv_process_dlptv_2010 software on a Sun Blade 1500 using the post transition data and the 2000 US Census. The Applicant proposed to use a Simple Out-of-Channel Emission Mask and requests that the Commission processes this instant application using the following Longley-Rice analysis settings:

- Cell Size for Service Analysis of 1.0 km/side
- Distance Increments for Longley-Rice Analysis of 1.00 km

It is believed that the proposed facility complies with the rule sections of 74.709, 74.793(e)-(h), 74.794(b) and 73.1030 and other applicable parts of the Rules and Regulations of the FCC. However, to the degree that it is deemed necessary, the Applicant requests a waiver of these other applicable Commission rules in order to allow for the grant of this instant application.

TV Broadcast Analog System Protection

The proposed operation causes less than 0.5% interference to surrounding analog authorized facilities (i.e., "*de minimis*"). It is believed that the proposed operation is in compliance with the spirit and intent of the FCC's interference standards.

Digital TV Station Protection

The proposed operation causes less than 0.5% interference to surrounding digital authorized facilities (i.e., "*de minimis*"). It is believed that the proposed operation is in compliance with the spirit and intent of the FCC's interference standards.

Class A, Low Power TV and TV Translator Station Protection

The proposed operation causes less than 0.5% interference to surrounding Class A authorized facilities and less than 2.0% interference to surrounding LPTV authorized facilities (i.e., "*de minimis*"). It is believed that the proposed operation is in compliance with the spirit and intent of the FCC's interference standards.

Transmission

The proposed facility will utilize Axcera transmitter Bandwidth Enhancement Technology ("BET"), which can reduce the bandwidth of the facility's 8VSB transmission. Axcera is a leading American broadcast television transmitter manufacturer that grew out of the old RCA transmitter manufacturing business. The Axcera transmitter to be used is fully FCC type-accepted and has been used successfully in authorized and licensed full power DTV stations in Texas and Puerto Rico. *See A Compatible Narrowband 8VSB Transmission System: Bandwidth Enhancement Technology and TechNotes: A Compatible 8 VSB Transmission System, March 2000.*

The Applicant will transmit an ancillary frequency modulated signal that is ± 75 KHz wide that will not interfere with the reception of the ATSC transmission. This ancillary service will be centered at 5.7 MHz from the bottom of the 6 MHz channel and outside of the primary BET Narrowband ATSC transmission. It will have a maximum ERP of 33% of the average level of the digital signal. This ancillary carrier will be duplicative with the audio carrier of the video signal of the station on PSIP 6.2.

FCC Objectives of Preservation of Complementary Services of LPTV Stations

In the Report and Order governing the Establishment of Digital Class A and LPTV, Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations, MB Docket 03-185, adopted September 9, 2004 and released September 30, 2004, the FCC reported at paragraph 20, Permissible Service:

"...most [analog LPTV] stations air locally produced and/or other programming not otherwise available in their communities. We seek to preserve in the digital world the important and complementary services provided by TV translator and LPTV stations."

By using this Axcera BET technology, the Applicant will be in fact preserving a complementary serviced currently provided by the station.

FCC Requirement of Non-interference to the Reception of the Digital Service

Because the Applicant proposes to utilize Axcera's BET technology, there will be no interference to the reception of the station's or any other station's DTV service. In its Report and Order the FCC concluded at para. 57 in response to its inquiry into the employment of transmission methods other than those based on DTV, that:

"digital LPTV stations should not be permitted to operate in a manner that could be likely to interfere with the reception of DTV service."

The Commission is clear that its goal is to permit innovation but to not allow a station to operate in any manner that caused interference to the DTV reception. Our proposed utilization of the Axcera BET technology along with a frequency modulated carrier will meet Commission rules because we will be operating in a manner that could not interfere with the reception of DTV service.

Instant Proposal Fulfills FCC Objectives for DTV

In the Fourth Report and Order In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, MM Docket No. 87-268, Adopted: December 24, 1996 Released: December 27, 1996, the Commission stated at Paragraph 30 regarding the digital television standard:

“In the Fifth Further Notice, we listed four objectives regarding the authorization and implementation of a DTV standard: 1) to ensure that all affected parties have sufficient confidence and certainty in order to promote the smooth introduction of a free and universally available digital broadcast television service; 2) to increase the availability of new products and services to consumers through the introduction of digital broadcasting; 3) to ensure that our rules encourage technological innovation and competition; and 4) to minimize regulation and assure that any regulations we do adopt remain in effect no longer than necessary.”

Clearly, this proposal to use the Axcera BET system furthers all four of these objectives.

The FCC has Allowed for a Free Market on Alternative Audio for DTV

Regarding audio development in DTV, the Commission concluded at Paragraph 53 of the Fourth Report and Order, that:

“Although some of the DTV signal would be devoted to the audio signal specified in the DTV Standard this does provide an avenue for the introduction of a new system that might offer a substantial improvement. A sufficiently superior system has an opportunity to succeed in the marketplace. Under the rules we are adopting, such dual audio system transmissions are permitted consistent with the DTV Standard.”

The instant proposal clearly is compatible with the ATSC standard because it does not interfere with the ATSC standard and it does provide a dual digital audio signal consistent with the DTV standard.

The FCC has Promoted Innovation in the DTV Service

In the Fifth Report and Order In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, MM Docket No. 87-268, adopted April 3, 1997 and released April 21, 1997, at Paragraph 29, the FCC concluded:

“The FCC wish[es] to preserve for viewers the public good of free television that is widely available today. At the same time, we recognize the benefit of permitting broadcasters the opportunity to develop additional revenue streams from innovative digital services. This will help broadcast television to remain a strong presence in the video programming market that will, in turn, help support a free programming service. Thus, we will allow broadcasters flexibility to respond to the demands of their audience by providing ancillary and supplementary services that do not derogate the mandated free, over-the-air

program service. Ancillary and supplementary services could include, but are not limited to, subscription television programming, computer software distribution, data transmissions, teletext, interactive services, *audio signals*, and any other services that do not interfere with the required free service.” (*emphasis added*)

This instant proposal meets these criteria because we will not denigrate nor interfere with the required free service on our ATSC signal.

The Commission also expressed its approval of broadcaster innovation in the Fifth Report and Order, stating:

“This decision is supported by the overwhelming weight of the record. Consistent with precedent that has treated telecommunications services provided by an NTSC station other than the regular television program service as ancillary, we will consider as ancillary and supplementary any service provided on the digital channel other than free, over-the-air services. In addition, we will not impose a requirement that the ancillary and supplementary services provided by the broadcaster must be broadcast-related.” at ¶30.

“The approach we take here, of allowing broadcasters flexibility to provide ancillary and supplementary services is supported both generally and specifically by the 1996 Act, enacted after issuance of the Fourth Further Notice/Third Inquiry. In general, the 1996 Act seeks “[t]o promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.” More importantly, the 1996 Act specifically gives the Commission discretion to determine, in the public interest, whether to permit broadcasters to offer such services. Section 336(a)(2) of the Communications Act, contained in Section 201 of the 1996 Act, provides that if the Commission issues additional licenses for advanced television services, it “shall adopt regulations that allow the holders of such licenses to offer such ancillary or supplementary services on designated frequencies as may be consistent with the public interest, convenience, and necessity.” at ¶31.

This application proposes to successfully utilize its channel to serve the consumers in a manner consistent with FCC rules.