

**FM Translator K204BI  
Bellingham, Washington Channel 204D  
Allocation Study Amendment  
December 2006**

By letter dated December 7, 2006, the Audio Division has requested that the applicant provide additional data to demonstrate that the proposed facility will provide interference protection to station KUGS 207A at Bellingham, Washington. In particular, the Audio Division is concerned about potential interference to nearby homes on the south slope of King Mountain.

KUGS operates on a third-adjacent channel to K204BI, from a tower site located on Sehome Hill. At that site, KUGS has both its licensed facility and its authorized CP facility. While the licensed KUGS facility operates with 100 Watt ERP omnidirectional, the KUGS CP facility is authorized with a directional antenna which limits the station's ERP in the direction of K204BI to less than 100 Watts. Accordingly, the KUGS CP is the "worst case" facility.

The existing and proposed K204BI transmitter site on King Mountain is located 7.33 km from KUGS at a bearing of 11 degrees True. Along this radial, the KUGS CP facility has an authorized ERP of 22.7 Watts at 184 meters HAAT. This results in KUGS placing a signal of 64.7 dBu at the King Mountain transmitter site.

The corresponding K204BI interfering contour is the 104.7 dBu F(50,10) contour.

As depicted on the attached map exhibit, the licensed K204BI 104.7 dBu interfering contour (red contour, calculated using the free space equation) already encompasses one home on King Mountain. The proposed 104.7 dBu interfering contour (black contour, calculated using the free space equation) encompasses just that one home and no others.

Based upon this analysis, only a single home is predicted to be subject to interference from the proposed K204BI facility, which home is already predicted to be subject to interference from the licensed K204BI facility. Accordingly, the interference to that home is believed to be grandfathered, while the other areas where the proposed interfering contour extends beyond the licensed interfering contour are unpopulated. Therefore, the proposed K204BI facility satisfies §74.1204(d) with respect to KUGS.

