

ENGINEERING STATEMENT IN SUPPORT OF AN
APPLICATION TO MODIFY BMPCDT-20080122ABD
KDMD-DT, FI 25221, CHANNEL 32, ANCHORAGE, AK

Introduction

KDMD analog is on channel 33 and KDMD-DT is on channel 32. As is well known it is technically preferable to have adjacent channel stations colocated as closely as possible. KDMD recently applied for and was granted an a CP for the digital station specifying the same location as the analog station, but this application was constrained by the combination of the freeze and the parameters in Appendix B¹. A considerable area north of Anchorage, including the communities of Wasilla, Houston and Palmer would not be well served by a station built with the antenna pattern which was necessarily specified in the previous application.

The purpose of this application is to change the antenna pattern to match the pattern of KDMD analog, and thereby filling out the coverage to the area covered by the analog station.

The population predicted to receive coverage will increase from the CP figure of 286,545 to 295,579. The comparable calculation for the Appendix B parameters yields a predicted population of 288,379.²

Environmental Assessment

The station will operate using the existing antenna, tower and building. There will be no construction and no associated environmental impact from site changes.

The non-ionizing radiation attributable to this station at head height above ground level calculated in accordance with OET Bulletin 65 is less than 0.5% of the allowable public limit. This is one tenth of the 5% exclusion limit and non-ionizing radiation is not a matter of environmental concern in connection with this application.

Protected Installations

¹Seventh Report and Order, MB Doc 87-268, Appendix B

²Population figures calculated with the V-Soft Probe III program using the OET Bulletin 69 Longley-Rice Terrain Dependent algorithm and the Year 2000 Census

There are no protected "Radio Astronomy" installations listed in § 73.1030 in Alaska, and the only protected FCC Field Office as listed in §0.121 is at Kenai. The spacing is 120 km compared to a suggested coordination distance of 16 km. This application has no impact on protected installations.

Required Coverage of the Principal Community

The problem of defining the community of Anchorage, Alaska is well known to the Commission. The parameters of this application provide coverage over the Borough of Anchorage populated area virtually duplicating the coverage of KDMD analog within the Borough limits. An exhibit illustrating the "Principal Community" 48 dBμ contour is included as part of this Engineering Statement.

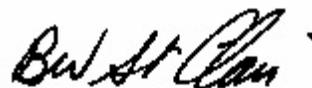
Allocation Considerations

Outgoing interference to present full service and Class A stations and "post transition" digital stations was checked in accordance with OET Bul. 69 using the Techware supplied interference analysis program. No interference above allowed limits was found.

Consultant's Declaration

This "Engineering Statement" is based on information supplied by the applicant, the antenna manufacturer, and from the FCC's CDBS database and "Tower Registration Database." Population calculations were made using the V-Soft Probe III program which is based on OET Bulletin 69, the 3 arc second terrain database and the year 2000 census. The results and statements presented herein are true and correct to the best of my knowledge and belief.

Respectfully submitted:



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Engineering Consultant

June 30, 2008