



B. W. St. Clair

1

ENGINEERING STATEMENT IN SUPPORT OF AN APPLICATION TO MODIFY BMPCDT20080618ACV KMIZ-DT, FI 63164, CHANNEL 17, COLUMBIA, MO

Introduction

This application requests a increase in ERP from the stations licensed 49.3 kW to 120 kW while retaining the in-place omni-directional antenna. No outgoing interference beyond the allowable limits is predicted.

Environmental Assessment

The station will operate using the existing antenna, tower and building of the analog station. There is no construction and consequently no associated environmental impact.

The worst case non-ionizing radiation at head height in the vicinity of the tower calculated in accordance with OET Bul. 65 is 0.43% of the allowable public limit. No special precautions are necessary to protect the public.¹

The applicant recognizes its responsibility to reduce the transmitter power to a safe level when any work is done on the tower above ground.

Required Coverage of the Principal Community

The 48 dB μ F50/90 contour extends well beyond the principal community of Columbia, MO. This is demonstrated in the attached plot.

¹See 47 CFR 1.1307(b)(3)

Covered Population

The proposed power increase results in an increase in population count as follows:

	Protected Contour Population
Current License	470,163
Appendix B	479,800
Application	492,172

All population counts were determined using the same computer program, terrain database and census count in order to have the most valid comparison.

Allocation Considerations

An outgoing interference analysis using the Techware duplicate of the FCC interference analysis programs shows no interference to any full service or Class A station either before or after the transition.

Protected Installations

There are no FCC monitoring stations or radio astronomy installations within several hundred kilometers. All are beyond the respective culling distances and no notifications are required.

Consultant's Declaration

This "Engineering Statement" is based on information supplied by the equipment manufacturers, application BMPCDT-20080618ACV and the applicant. Interference determinations were made using the Techware version of the FCC's OET Bul 69 interference analysis program. The contour plot was prepared using the V-Soft Probe IV software which closely duplicates the FCC results. The results and statements herein are true and correct to the best of my knowledge and belief.

Respectfully submitted;



B. W. St. Clair
Engineering Consultant
June 23, 2011