Interference Analysis

Page #2 of this exhibit is a computer generated channel study, showing the contour relationship between the proposed translator and adjacent stations. Page #3 is an explanation of the methods used in preparing the study.

It should be noted that there is significant outgoing contour overlap to a second adjacent station – KPKY Pocatello, ID. Therefore, the applicant requests a waiver of Section 74.1204(a) towards KPKY based on the fact that no actual interference will be caused towards KPKY.

Waiver Request

Section 73.1204(a) states that "an application for an FM translator station will not be accepted for filing if the proposed operation would involve overlap of predicted field strength contours with any other station, including commercial and noncommercial educational FM stations, FM translators and Class D (secondary) noncommercial educational FM stations." However, Section 74.1204(d) states that "the provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water. In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or other such factors as may be applicable*."*

Using the undesired-to-desired ratio method regarding interference to a second adjacent frequency, interference is predicted to occur where the translator's undesired signal exceeds the protection station's desired signal by more than 40 dB. In this case, the proposed translator site is essentially co-located with KPKY(FM). Therefore, no interference to KPKY(FM) is predicted due to the large power difference between the stations. KPKY(FM) operates with a circular polarized effective radiated power of 100 kilowatts; the proposed translator intends to operate with a maximum circular polarized effective radiated power of 0.041 kilowatts. This is a difference of more than 33 dB in favor of KPKY at all locations near or far from the proposed translator site. When considered with a desired-to-undesired ratio of 40 dB, this is an effective interference margin of 73 dB between the two stations. Therefore, the proposed translator will not cause interference towards KPKY(FM). It is simply impossible for the undesired signal of the proposed translator to exceed the desired signal of KPKY by more than 40 dB at ***any*** location at ground level. In conclusion, the applicant respectfully requests a waiver of Section 74.1204(a) since it has successfully "demonstrated that no actual interference will occur due to…..other factors as may be applicable."

AP237 Pocatello
Overlap Analysis

REFERENCE CH# 237D - 95.3 MHz, Pwr= 0.041 kW, HAAT=0.0 M, COR= 1787 M DISPLAY DATES
42 52 26 N Average Protected F(50-50)= 4.46 km DATA 11-20-04
112 30 47 W Ave. F(50-10) 40 dBu= 14.3 54 dBu= 6.4 80 dBu= 1.6 100 dBu= .4 SEARCH 11-24-04

CH CALL / CITY	TYPE / STATE	AZI. <--	DIST / FILE #	LAT. / LNG.	Pwr(kW) / HAAT(M)	COR(M) / INT(km)	PRO(km) / LICENSEE	*IN* / (Overlap in km)	*OUT*
235C KPKY	LIC CN	0.0	0.00	42 52 26	100.000	1808	31.0	-9.41*	-31.05*
Pocatello	ID	180.0	BLH19871117KD	112 30 47	-111	3.2	Citicasters Licenses, L.p.		
237D AP237	APP DC	0.0	0.00	42 52 26	0.000	1787	0.0	-6.25*	-25.41
Pocatello	ID	180.0	BNPFT20030829AKA	112 30 47	-132	0.0	Tauna M. Barbieri		
237D AP237	APP DC	0.0	0.00	42 52 26	0.000	1787	0.0	-6.25*	-25.41
Pocatello	ID	180.0	BNPFT20030313BQC	112 30 47	-132	0.0	Tauna M. Barbieri		
239D AP239	APP C	7.7	9.93	42 57 45	0.250	1431	7.1	2.61	2.76
Pocatello	ID	187.7	BNPFT20030317EQK	112 29 48	-140	1.1	Radio Assist Ministry, Inc		
239D AP239	APP DC	102.7	12.66	42 50 56	0.005	2080	11.0	0.75	1.25
Pocatello	ID	282.7	BNPFT20030317LXS	112 21 43	606	0.2	Citicasters Licenses, L.p.		
237C KZJH«	LIC CN	64.8	157.33	43 27 40	100.000	2474	85.7	-40.00	45.22
Jackson	WY	244.8	BLH19890714KA	110 45 09	483	189.5	Chaparral Broadcasting Com		
238D K238AQ	CP C	241.9	27.58	42 45 25	0.041	1582	10.8	7.26	8.78
American Falls	ID	61.9	BNPFT20030828AET	112 48 38	169	15.4	Radio Assist Ministry, Inc		
239D AP239	APP C	29.1	76.66	43 28 31	0.250	1484	11.1	70.32	65.51
Idaho Falls	ID	209.1	BNPFT20030317EOS	112 03 03	73	1.1	Radio Assist Ministry, Inc		

ERP and HAAT are on direct line to and from reference station.
"*"Affixed to 'IN' or 'Out' values = site inside protected contour.
"«" = Station meets FCC minimum distance spacing for its class.

Spacings Study Key for Use

The computer printout on the preceding page should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using spline interpolation from data points identical to those published in Report No. RS 76-01 by Gary C. Kalagian. Critical contour distances are determined using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed "* IN *" is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of interference. Listed antenna heights are the average heights of eight standard radials as found in the Commission's records unless otherwise noted, in which case the specific antenna heights and the DA power, if applicable, along the straight line azimuths between the reference station and the database station are used and visa versa. The column labeled "* OUT *" shows the distance in kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing overlap interference.

Under the "AZIMUTH" column, the first row of numbers indicate the bearings from True North of the data base stations in relationship with the reference station, while the numbers in the second row indicate the reverse bearings from the database station to the reference station. The columns labeled "INT" and "PRO" hold the distance in kilometers of the appropriate interference contour and the protected contour of a data base station. For I.F. relationships the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum required distance in kilometers, while the letter "M" in the next column follows the available clear space separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended.

Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement". The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. “Z” indicates a 73.215 directional. An “N” indicates it is a 73.215 station that operates omni. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an “X” if the commission is not sure, otherwise it will be an “N”.

FAXED

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May 18, 2004

Attn: Kevin Terry
Consulting Engineer for
Tauna M. Barbieri
(801) 560-9595
(801) 412-6080

Dear Mr. Terry:

Ref: Tauna M. Barbieri's Proposed Installation of a new FM translator, File No. BNPFT-20030829AKA, to be co-located with existing FM translators K249CM, K266AF and K204AL in Pocatello, ID.

Thank you for your drawings and narrative regarding the proposed installation of the CA2-CP directional antenna for FM translator File No. BNPFT-20030829AKA to be co-located on a separate existing tower structure (8.2 meters) north of the existing FM translators K249CM, K266AF and K204AL.

With the proposed mounting of the CA2-CP directional antenna, for FM translator File No. BNPFT-20030829AKA, on a separate existing tower structure positioned 8.2 meters due north and at a height 2 meters above the existing directional antennas of FM translators K249CM, K266AF and K204AL, there is no anticipated significant adverse effect to the directional radiation pattern of the before mention existing FM translators at this site or the directional pattern of the proposed CA2-CP directional antenna.

This opinion carries no performance guarantee and is based solely on the data provided by Kevin Terry, Tauna M. Barbieri's Consulting Engineer and the practical experience of our sales engineers. It is by no means a comprehensive analysis and Kathrein-Scala recommends Tauna M. Barbieri to engage the services of a qualified communications firm for a definitive evaluation. The furnished data has not been verified by Kathrein-Scala for completeness or accuracy.

Please feel free to contact me if you need further assistance.

Best regards,

Mike Johnson,
Sales Engineer
KATHREIN INC., SCALA DIVISION
mjohnson@kathrein.com